L2 635 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	155.42	155.63

FILE 'CAPLUS' ENTERED AT 15:54:16 ON 26 NOV 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 26 Nov 2004 VOL 141 ISS 23
FILE LAST UPDATED: 25 Nov 2004 (20041125/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l2
L3 35 L2

=> d l3 1-25 ibib abs hitstr

L3 ANSWER 1 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:132931 CAPLUS
DOCUMENT NUMBER: 138:165206
TITLE: Selective herbicides based on substituted cyclic ketoenols and safeners
INVENTOR(S): Fischer, Reiner; Drewes, Mark Wilhelm; Feucht, Dieter; Dahmen, Peter; Pontzen, Rolf
PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003013249	A1	20030220	WO 2002-EP8413	20020729

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 24 NOV 2004 HIGHEST RN 788132-72-9
DICTIONARY FILE UPDATES: 24 NOV 2004 HIGHEST RN 788132-72-9

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

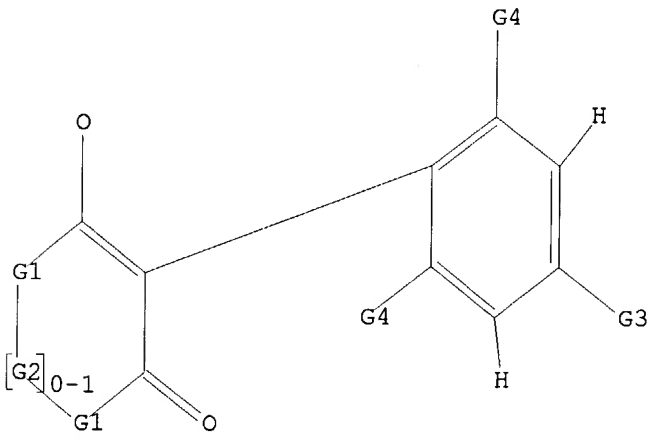
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
Uploading C:\Program Files\Stnexp\Queries\070767.str

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



G1 C,N

G2 C,O,S,N

G3 Me,Et

G4 C,O

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full
FULL SEARCH INITIATED 15:54:08 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 115276 TO ITERATE

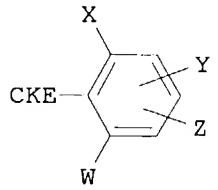
100.0% PROCESSED 115276 ITERATIONS 635 ANSWERS
SEARCH TIME: 00.00.01

TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

DE 10139465	A1	20030220	DE 2001-10139465		20010810
EP 1418811	A1	20040519	EP 2002-794524		20020729
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK					
BR 2002011829	A	20040908	BR 2002-11829		20020729
PRIORITY APPLN. INFO.:			DE 2001-10139465	A	20010810
			WO 2002-EP8413	W	20020729

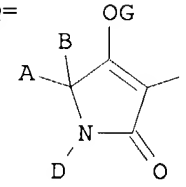
OTHER SOURCE(S): MARPAT 138:165206

GI



I

Q=



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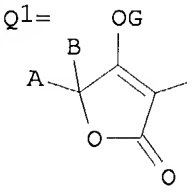


AB The invention relates to selective herbicidal compns. containing a cyclic ketoenol I [X = halo, alkyl, alkenyl, alkoxy, etc.; Z = H, (un)substituted alkenyl, alkynyl, aryl or heteroaryl; W, Y = H, halo, (halo)alkyl, (halo)alkoxy, (halo)alkenyloxy, NO2 or CN; CKE = Q, Q1, etc.; A = H, (halo)alkyl, (halo)alkenyl, etc.; B = H, alkyl or alkoxyalkyl; D = H, (un)subtituted alkyl, alkenyl, alkynyl, etc.; ACB, ACD = (un)substituted cycle; G = H, COR1, etc.; R1 = H, (un)substituted alkyl, alkenyl alkoxyalkyl, etc.] and a herbicide antidote, especially cloquintocet-mexyl and mefenpyr-diethyl.

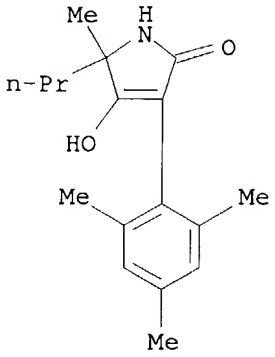
IT **497251-89-5 497251-95-3**
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(safened herbicidal composition)

RN 497251-89-5 CAPLUS

CN 1H-Pyrazole-3,5-dicarboxylic acid, 1-(2,4-dichlorophenyl)-4,5-dihydro-5-methyl-, diethyl ester, mixt. with 1,5-dihydro-4-hydroxy-5-methyl-5-propyl-3-(2,4,6-trimethylphenyl)-2H-pyrrol-2-one (9CI) (CA INDEX NAME)

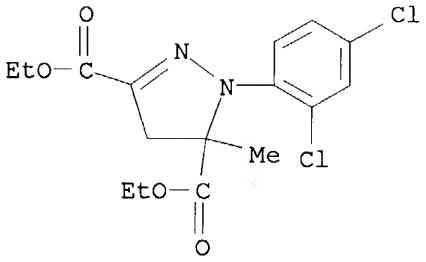
CM 1

CRN 497251-88-4
CMF C17 H23 N O2



CM 2

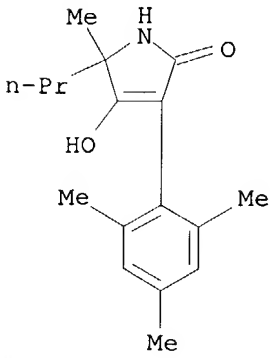
CRN 135590-91-9
CMF C16 H18 Cl2 N2 O4



RN 497251-95-3 CAPLUS
CN Acetic acid, [(5-chloro-8-quinolinyl)oxy]-, 1-methylhexyl ester, mixt. with 1,5-dihydro-4-hydroxy-5-methyl-5-propyl-3-(2,4,6-trimethylphenyl)-2H-pyrrol-2-one (9CI) (CA INDEX NAME)

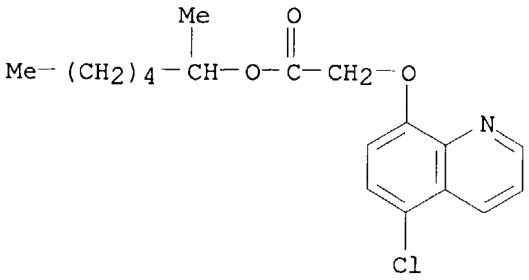
CM 1

CRN 497251-88-4
CMF C17 H23 N O2



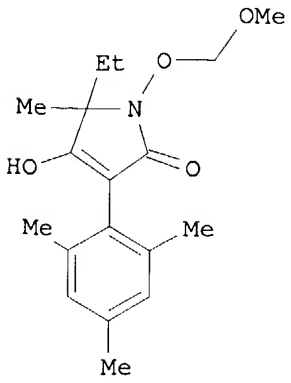
CM 2

CRN 99607-70-2
CMF C18 H22 Cl N O3



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 2 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:52788 CAPLUS
DOCUMENT NUMBER: 139:241629
TITLE: Synthesis and insecticidal activity of novel N-oxydihydropyrroles: 4-hydroxy-3-mesityl-1-methoxymethoxy derivatives with various substituents at the 5-position
AUTHOR(S): Ito, Mitsuru; Okui, Hideshi; Nakagawa, Harumi; Mio, Shigeru; Kinoshita, Ayako; Obayashi, Takashi; Miura, Takako; Nagai, Junko; Yokoi, Shinji; Ichinose, Reiji; Tanaka, Keiji; Kodama, Seiichiro; Iwasaki, Toshiaki; Miyake, Takaaki; Takashio, Miho; Iwabuchi, Jun
CORPORATE SOURCE: Agroscience Research Laboratories, Sankyo Co., Ltd., Yasu-gun, Shiga, Yasu-cho, 520-2342, Japan
SOURCE: Bioorganic & Medicinal Chemistry (2003), 11(5), 761-768
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 139:241629
GI



I

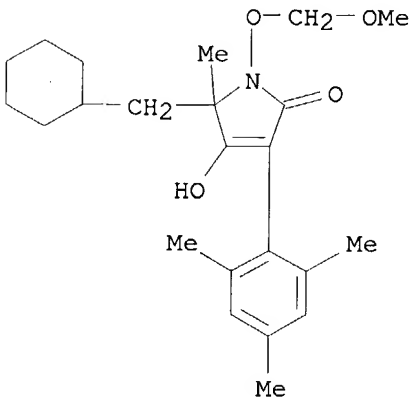
AB This paper reports the synthesis and insecticidal activity of a series of

novel 4-hydroxy-3-mesityl-1-methoxymethoxy-1,5-dihydro-2H-pyrrol-2-one derivs. (e.g., I), in which the substituents at the 5-position were varied with a number of alkyl and spirocycloalkyl groups. Investigation of the structure-activity relationships revealed that small alkyl and spirocyclohexyl groups had a favorable effect on the insecticidal activity of these agents against Myzus persicae. However, almost all of these derivs. were phytotoxic to cucumber at 500 ppm.

IT **306946-39-4P**
RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and insecticidal activity of)

RN 306946-39-4 CAPLUS

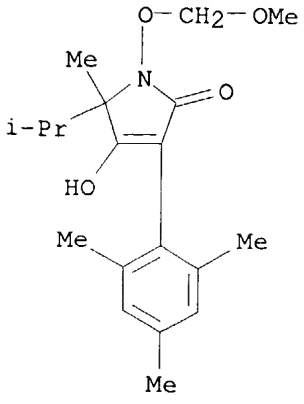
CN 2H-Pyrrol-2-one, 5-(cyclohexylmethyl)-1,5-dihydro-4-hydroxy-1-(methoxymethoxy)-5-methyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



IT **306945-55-1P 306945-56-2P 306945-57-3P**
306946-37-2P 306946-42-9P 596806-66-5P
RL: ADV (Adverse effect, including toxicity); AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation, insecticidal activity, and phytotoxicity of)

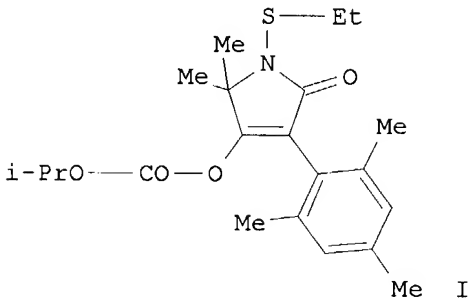
RN 306945-55-1 CAPLUS

CN 2H-Pyrrol-2-one, 1,5-dihydro-4-hydroxy-1-(methoxymethoxy)-5-methyl-5-(1-methylethyl)-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:52775 CAPLUS
DOCUMENT NUMBER: 139:209250
TITLE: Synthesis and insecticidal activity of novel dihydropyrrole derivatives with N-sulfanyl, sulfinyl, and sulfonyl moieties
AUTHOR(S): Ito, Mitsuru; Okui, Hideshi; Nakagawa, Harumi; Mio, Shigeru; Kinoshita, Ayako; Obayashi, Takashi; Miura, Takako; Nagai, Junko; Yokoi, Shinji; Ichinose, Reiji; Tanaka, Keiji; Kodama, Seiichiro; Iwasaki, Toshiaki; Miyake, Takaaki; Takashio, Miho; Iwabuchi, Jun
CORPORATE SOURCE: Agroscience Research Laboratories, Sankyo Co., Ltd., Yasu-cho, Yasu-gun, Shiga, 520-2342, Japan
SOURCE: Bioorganic & Medicinal Chemistry (2003), 11(4), 489-494
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 139:209250
GI

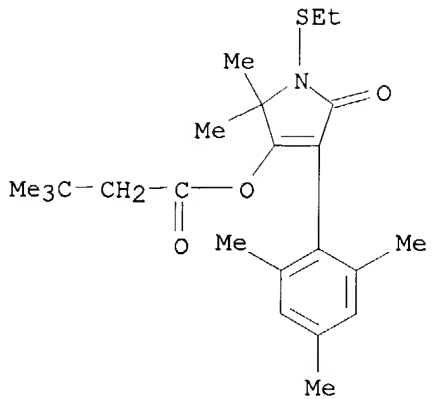


I

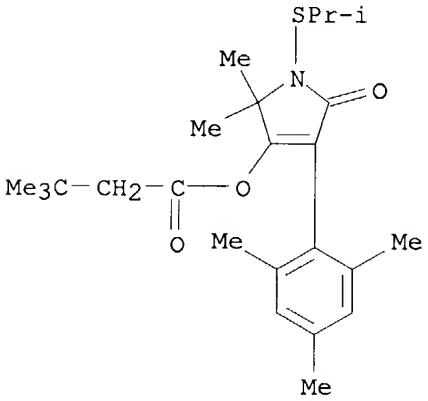
AB This paper reports the synthesis and insecticidal activity of a new type of dihydropyrrole derivs. (e.g., I) with sulfur moieties such as sulfanyl, sulfinyl, and sulfonyl groups at the 1-position. These derivs. exhibited high insecticidal potency against Nilaparvata lugens and Nephotettix cincticeps. Investigation of the structure-activity relationships revealed that the alkoxycarbonyloxy groups at the 4-position tended to increase the systemic insecticidal activity.

IT **306948-44-7 306948-53-8 306948-54-9 306948-55-0 306948-56-1 306948-57-2 462652-80-8**
RL: ADV (Adverse effect, including toxicity); AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)
(insecticidal activity and phytotoxicity to rice of)

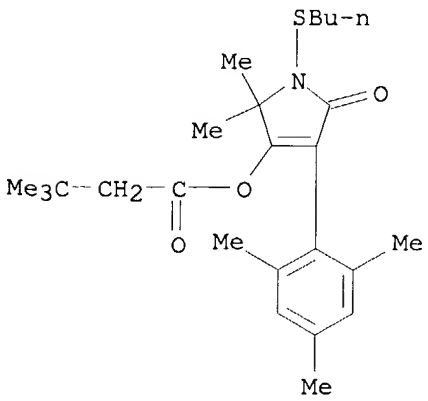
RN 306948-44-7 CAPLUS
CN Butanoic acid, 3,3-dimethyl-, 1-(ethylthio)-2,5-dihydro-2,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)



RN 306948-53-8 CAPLUS
CN Butanoic acid, 3,3-dimethyl-, 2,5-dihydro-2,2-dimethyl-1-[(1-methylethyl)thio]-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)

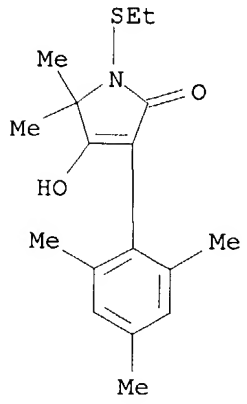


RN 306948-54-9 CAPLUS
CN Butanoic acid, 3,3-dimethyl-, 1-(butylthio)-2,5-dihydro-2,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)



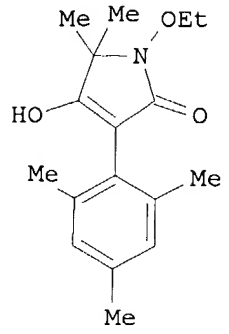
RN 306948-55-0 CAPLUS

(preparation and transformation of hydroxyl group of)
RN 306950-89-0 CAPLUS
CN 2H-Pyrrol-2-one, 1-(ethylthio)-1,5-dihydro-4-hydroxy-5,5-dimethyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 4 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:947143 CAPLUS
DOCUMENT NUMBER: 138:321087
TITLE: Synthesis and insecticidal activity of N-oxydihydropyrroles: 4-hydroxy-3-mesityl-5,5-dimethyl derivatives with various substituents at the 1-position
AUTHOR(S): Ito, Mitsuru; Okui, Hideshi; Nakagawa, Harumi; Mio, Shigeru; Kinoshita, Ayako; Obayashi, Takashi; Miura, Takako; Nagai, Junko; Yokoi, Shinji; Ichinose, Reiji; Tanaka, Keiji; Kodama, Seiichiro; Iwasaki, Toshiaki; Miyake, Takaaki; Takashio, Miho; Iwabuchi, Jun
CORPORATE SOURCE: Agroscience Research Laboratories, Crop Protection Company, Sankyo Co. Ltd., Shiga, 520-2342, Japan
SOURCE: Bioscience, Biotechnology, and Biochemistry (2002), 66(11), 2406-2414
CODEN: BBBIEJ; ISSN: 0916-8451
PUBLISHER: Japan Society for Bioscience, Biotechnology, and Agrochemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:321087
GI



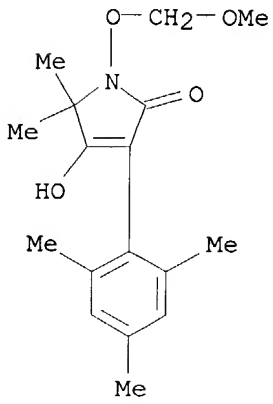
I

AB A new series of N-oxydihydropyrrole derivs., e.g. I, was synthesized and evaluated for insecticidal activity against Nilaparvata lugens and Myzus persicae. Various substituents were introduced to the 1-position of the dihydropyrrole ring, and the derivs. obtained exhibited systemic and/or contact insecticidal activity. The structure-activity relationship revealed that small alkoxy and alkoxy-alkoxy groups were more favorable than alkylcarbonyloxy, alkoxycarbonyloxy, or sulfonyloxy groups as substituents at the 1-position.

IT **306944-57-0P 306944-66-1P 306944-95-6P**
306944-98-9P 306945-01-7P 306945-02-8P
306945-05-1P 306945-11-9P 306945-20-0P
306945-22-2P 306945-25-5P 306945-47-1P
306945-48-2P 330151-36-5P 514207-07-9P
514207-08-0P
RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis, structure-activity, and insecticidal activity of noxydihydropyrroles hydroxymesityldimethyl derivs. with various substituents at position)

RN 306944-57-0 CAPLUS

CN 2H-Pyrrol-2-one, 1,5-dihydro-4-hydroxy-1-(methoxymethoxy)-5,5-dimethyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



RN 306944-66-1 CAPLUS

CN Butanoic acid, 3,3-dimethyl-, 2,5-dihydro-1-[(methoxycarbonyl)oxy]-2,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)

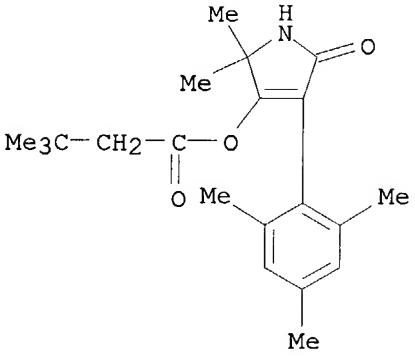
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:410662 CAPLUS
DOCUMENT NUMBER: 137:262910
TITLE: Efficient N-sulfenylation of dihydropyrrole derivatives using N-sulfenylphthalimides
AUTHOR(S): Ito, Mitsuru; Okui, Hideshi; Nakagawa, Harumi; Mio, Shigeru; Iwasaki, Toshiaki; Iwabuchi, Jun
CORPORATE SOURCE: Agroscience Research Laboratories, Sankyo Co., Ltd., Shiga, 520-2342, Japan
SOURCE: Heterocycles (2002), 57(5), 909-914
CODEN: HTCYAM; ISSN: 0385-5414
PUBLISHER: Japan Institute of Heterocyclic Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:262910

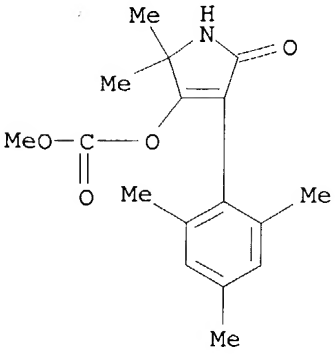
AB Ultrasound treatment of dihydropyrrole derivs. with N-sulfenylphthalimides in the presence of base gave the corresponding N-sulfenyldihydropyrrole derivs.

IT **139037-21-1 462652-81-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(ultrasound N-sulfenylation of dihydropyrrole derivs. using N-sulfenylphthalimides)

RN 139037-21-1 CAPLUS
CN Butanoic acid, 3,3-dimethyl-, 2,5-dihydro-2,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)

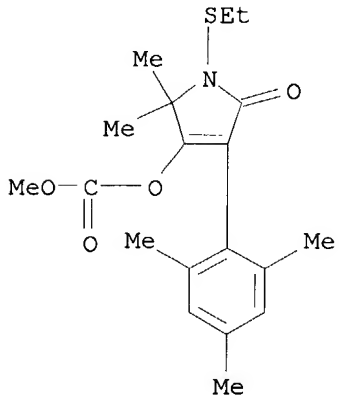


RN 462652-81-9 CAPLUS
CN Carbonic acid, 2,5-dihydro-2,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl methyl ester (9CI) (CA INDEX NAME)

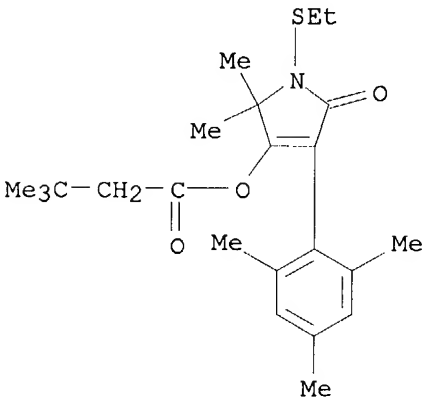


IT **306944-67-2P 306948-44-7P 306948-53-8P**
306948-54-9P 306948-55-0P 306948-56-1P
306948-57-2P 462652-80-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(ultrasound N-sulfenylation of dihydropyrrole derivs. using N-sulfenylphthalimides)

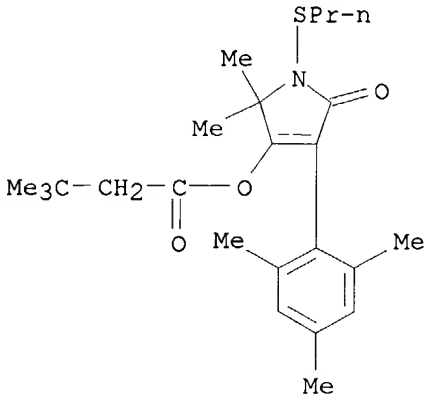
RN 306944-67-2 CAPLUS
CN Carbonic acid, 1-(ethylthio)-2,5-dihydro-2,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl methyl ester (9CI) (CA INDEX NAME)



RN 306948-44-7 CAPLUS
CN Butanoic acid, 3,3-dimethyl-, 1-(ethylthio)-2,5-dihydro-2,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)



RN 306948-53-8 CAPLUS
CN Butanoic acid, 3,3-dimethyl-, 2,5-dihydro-2,2-dimethyl-1-[(1-methylethyl)thio]-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)



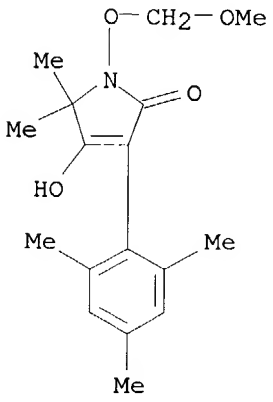
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:410659 CAPLUS
DOCUMENT NUMBER: 137:294837
TITLE: Synthesis of N-oxydihydropyrrole derivatives
AUTHOR(S): Ito, Mitsuru; Okui, Hideshi; Nakagawa, Harumi; Mio, Shigeru; Iwasaki, Toshiaki; Iwabuchi, Jun
CORPORATE SOURCE: Agroscience Research Laboratories, Sankyo Co., Ltd., Shiga, 520-2342, Japan
SOURCE: Heterocycles (2002), 57(5), 881-894
CODEN: HTCYAM; ISSN: 0385-5414
PUBLISHER: Japan Institute of Heterocyclic Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

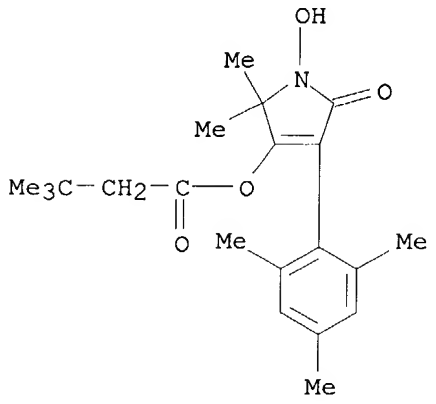
AB N-Oxydihydropyrrole derivs. were synthesized through an intramol. Claisen condensation reaction. The N-acylation of hindered hydroxylamines played a key role in providing the useful intermediates, which could be converted to a variety of N-oxydihydropyrrole derivs.

IT **306944-57-0P 306950-86-7P 306950-87-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of N-oxydihydropyrrole derivs.)

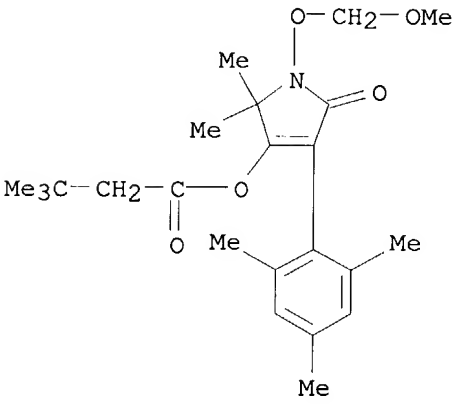
RN 306944-57-0 CAPLUS
CN 2H-Pyrrol-2-one, 1,5-dihydro-4-hydroxy-1-(methoxymethoxy)-5,5-dimethyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



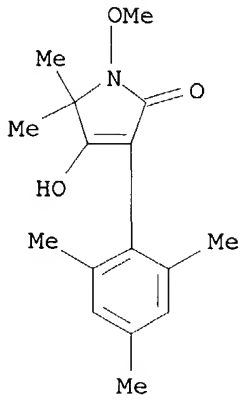
RN 306950-86-7 CAPLUS
CN Butanoic acid, 3,3-dimethyl-, 2,5-dihydro-1-hydroxy-2,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)



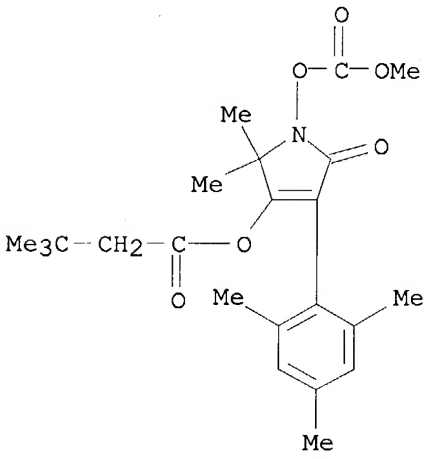
RN 306950-87-8 CAPLUS
CN Butanoic acid, 3,3-dimethyl-, 2,5-dihydro-1-(methoxymethoxy)-2,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)



IT **306944-55-8P 306944-66-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of N-oxydihydropyrrole derivs.)
RN 306944-55-8 CAPLUS
CN 2H-Pyrrol-2-one, 1,5-dihydro-4-hydroxy-1-methoxy-5,5-dimethyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



RN 306944-66-1 CAPLUS
CN Butanoic acid, 3,3-dimethyl-, 2,5-dihydro-1-[(methoxycarbonyl)oxy]-2,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)



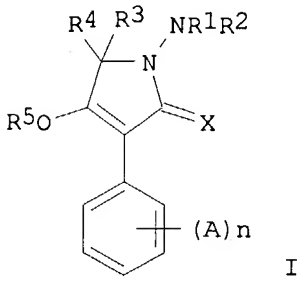
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:891584 CAPLUS
DOCUMENT NUMBER: 136:37501
TITLE: Preparation of 1-aminodihydropyrroles and their intermediates, and their use as pesticides
INVENTOR(S): Iwasaki, Toshiaki; Takashio, Miho; Kodama, Seiichiro; Miyake, Takaaki; Iwabuchi, Atsushi; Mio, Shigeru; Ichinose, Reiji
PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan; Nippon Kayaku Co., Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 62 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 2001342175	A2	20011211	JP 2001-90723		20010327
PRIORITY APPLN. INFO.:			JP 2000-89463	A	20000328
OTHER SOURCE(S):	MARPAT 136:37501				

GI



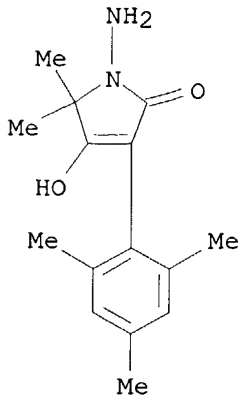
I

AB Title compds. I [R1, R2 = H, (un)substituted C1-12 alkyl, (un)substituted C2-6 alkenyl, C2-6 alkynyl, (un)substituted Ph, 5- to 6-membered (un)substituted heterocyclyl, etc.; R3, R4 = H, (un)substituted C1-6 alkyl, C3-6 cycloalkyl, (un)substituted C2-6 alkenyl, C2-6 alkynyl, (un)substituted Ph, etc.; R5 = H, (un)substituted C2-10 alkylcarbonyl, (un)substituted C2-8 alkoxycarbonyl, (un)substituted C4-7 cycloalkoxycarbonyl, (un)substituted (phenoxy)thiocarbonyl, etc.; A = (un)substituted C1-6 alkyl, halo, C1-6 alkylthio, (un)substituted Ph, cyano, NO2, etc.; n = 1-5; X = O, S], their salts, and their intermediates, R1NR2N(CR3R4CO2R9)COCH2C6H5-nAn (R1-R4, A, n = same as above; R9 = H, C1-6 alkyl), are prepared The 1-aminodihydropyrroles are useful for herbicides, defoliants, plant growth regulators, acaricides, nematocides, termiticides (no data), and insecticides. Thus, condensation of PhCH2O2CNHNHCMe2CO2Me with 2,4,6-Me3C6H2CH2COCl gave 72% PhCH2O2CNHN(CMe2CO2Me)COCH2C6H2Me3-2,4,6, which was treated with Me3COK to afford 77% I (A = 2,4,6-Me3, R1 = PhCH2O2C, R2 = R5 = H, R3 = R4 = Me, X = O). The product showed ≥80% insecticidal activity against Nilaparvata lugens.

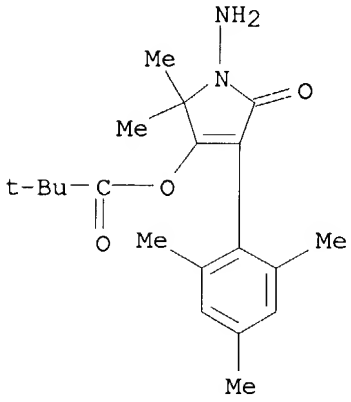
IT **375827-29-5P 375827-30-8P 375827-31-9P**
375827-32-0P 375827-34-2P 375827-35-3P
375827-36-4P 375827-37-5P 375827-38-6P
375827-39-7P 375827-40-0P 375827-41-1P
375827-43-3P 375827-44-4P 375827-45-5P
375827-46-6P 375827-47-7P 375827-64-8P
375827-65-9P 375827-66-0P 375827-68-2P
375827-69-3P 375827-70-6P 375827-71-7P
375827-72-8P 375827-73-9P 375827-74-0P
375827-75-1P 375827-76-2P 375827-77-3P
375827-78-4P 375827-80-8P 375827-81-9P
375827-82-0P 375827-83-1P 375827-84-2P
RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 1-aminodihydropyrroles for pesticides)

RN 375827-29-5 CAPLUS

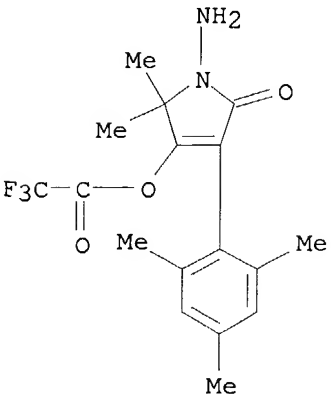
CN 2H-Pyrrol-2-one, 1-amino-1,5-dihydro-4-hydroxy-5,5-dimethyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



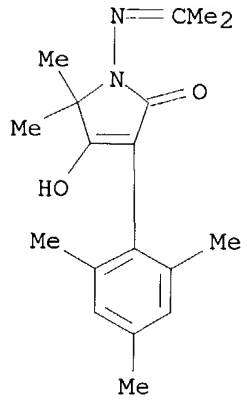
RN 375827-30-8 CAPLUS
CN Propanoic acid, 2,2-dimethyl-, 1-amino-2,5-dihydro-2,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)



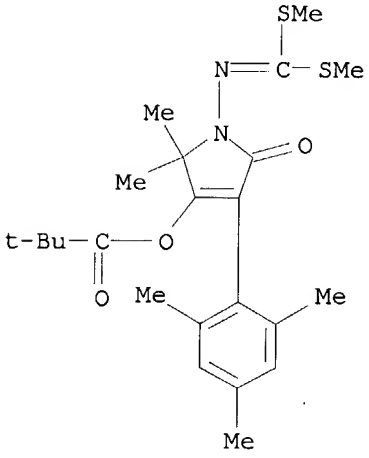
RN 375827-31-9 CAPLUS
CN Acetic acid, trifluoro-, 1-amino-2,5-dihydro-2,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)



RN 375827-32-0 CAPLUS
CN Carbonic acid, 1-amino-2,5-dihydro-2,2-dimethyl-5-oxo-4-(2,4,6-



RN 375827-84-2 CAPLUS
CN Propanoic acid, 2,2-dimethyl-, 1-[[bis(methylthio)methylene]amino]-2,5-dihydro-2,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)



L3 ANSWER 8 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

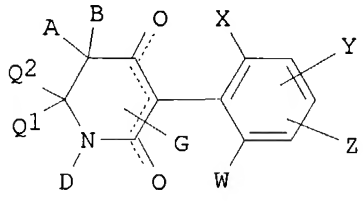
ACCESSION NUMBER:	2001:780886 CAPLUS
DOCUMENT NUMBER:	135:318424
TITLE:	Preparation of aryl-substituted 4-hydroxy-tetrahydropyridone derivatives as pesticides and herbicides
INVENTOR(S):	Fischer, Reiner; Graff, Alan; Trautwein, Axel; Ullmann, Astrid; Schneider, Udo; Wischnat, Ralf; Drewes, Mark Wilhelm; Erdelen, Christoph; Feucht, Dieter
PATENT ASSIGNEE(S):	Bayer Aktiengesellschaft, Germany
SOURCE:	PCT Int. Appl., 157 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	German
FAMILY ACC. NUM. COUNT:	1
PATENT INFORMATION:	

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

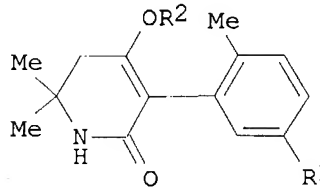
WO 2001079204	A1	20011025	WO 2001-EP3864	20010405
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 10019145	A1	20011025	DE 2000-10019145	20000418
EP 1276741	A1	20030122	EP 2001-940288	20010405
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001010180	A	20030305	BR 2001-10180	20010405
JP 2004527451	T2	20040909	JP 2001-576803	20010405
US 2003176464	A1	20030918	US 2002-257237	20021009
PRIORITY APPLN. INFO.:			DE 2000-10019145 A	20000418
			WO 2001-EP3864 W	20010405

OTHER SOURCE(S): MARPAT 135:318424

GI



I



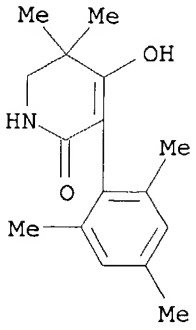
II

AB Title compds. I; [W = H, alkyl, alkenyl, alkynyl, halogen, haloalkyl, alkoxy; X = halogen, alkyl, alkenyl, alkynyl, haloalkyl, haloalkoxy; Y = H, halogen, alkoxy, alkenyl, alkynyl; Z = H, halogen, alkyl, alkoxy, CN, haloalkyl, haloalkoxy; A = H, (halo-substituted) alkyl, alkenyl, alkoxyalkyl, (substituted) (hetero)cycloalkyl, etc.; B = H, alkyl; AB, Q1Q2 = atoms to form a (substituted) (heterocyclic) ring; D = H, (substituted) alkyl, alkenyl, alkynyl, alkoxyalkyl, (unsatd.) (hetero)cycloalkyl; DQ1 = (substituted) alkyl, alkoxy; Q1 = H, alkyl; G = H, acyl, etc.], were prepared for their use as pesticides and herbicides. Thus, 4-hydroxy-tetrahydropyridone derivative [II; R1 = 4-chlorophenyl, R2 = CO2Et (III)] was prepared by the reaction of Et chloroformate and II (R1 = 4-chlorophenyl, R2 = H). III (250g/ha) was tested for its pesticidal and herbicidal activity [post-emergence lethality; 70% vs. Echinochloa, 80% vs. Setaria, and 80% vs. Amaranthus].

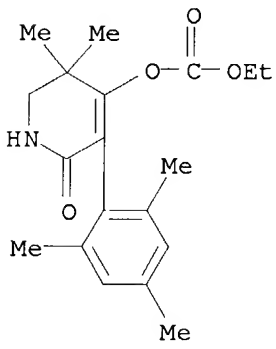
IT **368444-38-6P 368444-68-2P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aryl-substituted hydroxytetrahydropyridone derivs. as pesticides, fungicides and herbicides)

RN 368444-38-6 CAPLUS

CN 2(1H)-Pyridinone, 5,6-dihydro-4-hydroxy-5,5-dimethyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



RN 368444-68-2 CAPLUS
CN Carbonic acid, ethyl 1,2,5,6-tetrahydro-5,5-dimethyl-2-oxo-3-(2,4,6-trimethylphenyl)-4-pyridinyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:747747 CAPLUS
DOCUMENT NUMBER: 135:288687
TITLE: Preparation of aryl-substituted heterocyclic ketoenols as pesticides and herbicides.
INVENTOR(S): Ruther, Michael; Hagemann, Hermann; Schneider, Udo; Dollinger, Markus; Dahmen, Peter; Wachendorff-neumann, Ulrike; Fischer, Reiner; Graff, Alan; Bretschneider, Thomas; Erdelen, Christoph; Drewes, Mark Wilhelm; Feucht, Dieter; Lieb, Folker
PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany; et al.
SOURCE: PCT Int. Appl., 243 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001074770	A1	20011011	WO 2001-EP3215	20010321

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,

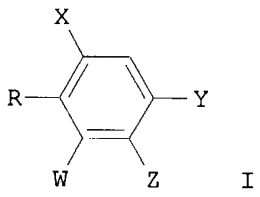
RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

DE 10016544	A1	20011011	DE 2000-10016544	20000403
CA 2404868	AA	20020930	CA 2001-2404868	20010321
EP 1280770	A1	20030205	EP 2001-917102	20010321
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001009750	A	20030225	BR 2001-9750	20010321
JP 2004501071	T2	20040115	JP 2001-572465	20010321
ZA 2002006836	A	20030918	ZA 2002-6836	20020827
US 2003216260	A1	20031120	US 2002-239331	20021216

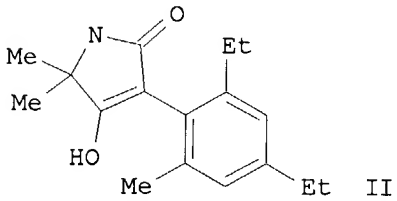
PRIORITY APPLN. INFO.: DE 2000-10016544 A 20000403
WO 2001-EP3215 W 20010321

OTHER SOURCE(S): MARPAT 135:288687

GI

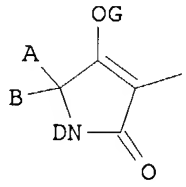


I

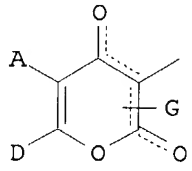


II

Q^1 =



Q^2 =

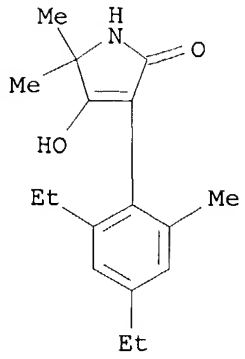


AB Title compds. I; [W = H, alkyl, alkenyl, alkynyl; X = alkyl, alkenyl, alkynyl; Y = H, Me, Et, Me2CH, alkenyl, alkynyl; Z = H, alkyl, alkenyl, alkynyl; ≥1 of W, X, Y, Z = chain containing ≥2 C atoms; R = Q1, Q2, etc.; A = H, (halo-substituted) alkyl, alkenyl, alkoxyalkyl, (substituted) (hetero)cycloalkyl, etc.; B = H, alkyl, alkoxyalkyl; AB, AD = atoms to form a (substituted) (heterocyclic) ring; D = H, (substituted) alkyl, alkenyl, alkynyl, alkoxyalkyl, (unsatd.) (hetero)cycloalkyl, etc.; G = H, acyl], were prepared Thus, 2,4-diethyl-6-methylphenylacetic acid was stirred with SOCl2 and the residue in THF was added to a 0-10° solution of Me 2-amino-2-methylpropionate and Et3N in THF followed by stirring from 1 h to give 66% amide, which was heated with KOCMe3 in DMF to give 58% title compound (II). II at 1000 ppm gave 100% kill of Nephotettix cincticeps on rice seedlings.

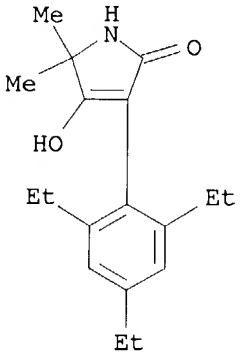
IT **364373-64-8P 364373-67-1P 364373-71-7P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aryl-substituted heterocyclic ketoenols as pesticides and herbicides)

RN 364373-64-8 CAPLUS

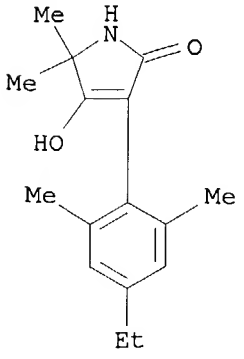
CN 2H-Pyrrol-2-one, 3-(2,4-diethyl-6-methylphenyl)-1,5-dihydro-4-hydroxy-5,5-dimethyl- (9CI) (CA INDEX NAME)



RN 364373-67-1 CAPLUS
CN 2H-Pyrrol-2-one, 1,5-dihydro-4-hydroxy-5,5-dimethyl-3-(2,4,6-triethylphenyl)- (9CI) (CA INDEX NAME)



RN 364373-71-7 CAPLUS
CN 2H-Pyrrol-2-one, 3-(4-ethyl-2,6-dimethylphenyl)-1,5-dihydro-4-hydroxy-5,5-dimethyl- (9CI) (CA INDEX NAME)



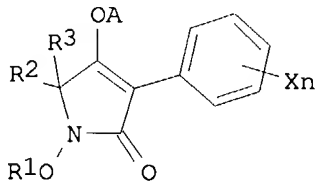
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:194786 CAPLUS
DOCUMENT NUMBER: 134:237385

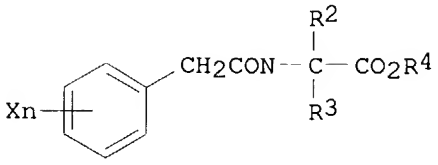
TITLE: Preparation of pyrrolidines and their use as herbicides
INVENTOR(S): Kato, Masahiko; Yamada, Yasuo; Sato, Atsushi; Takahashi, Akihiro
PATENT ASSIGNEE(S): Nippon Soda Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001072661	A2	20010321	JP 1999-250404	19990903
PRIORITY APPLN. INFO.:			JP 1999-250404	19990903

OTHER SOURCE(S): CASREACT 134:237385; MARPAT 134:237385
GI



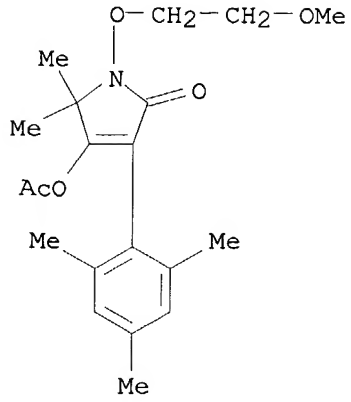
I



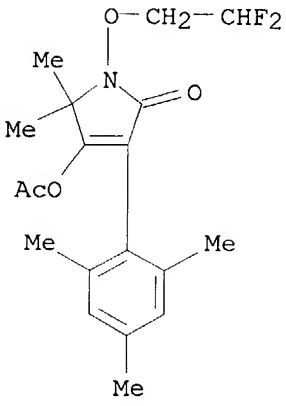
II

AB Pyrrolidines I [A = H, C1-6 (halo)alkyl, C2-6 alkenyl, (un)substituted PhCH2, C1-6 alkylsulfonyl, etc.; R1 = H, C1-6 (halo)alkyl, C2-6 alkenyl, C3-6 cycloalkyl, (un)substituted PhCH2, etc.; R2, R3 = H, C1-6 alkyl; R2R3 may form ring; X = halo, NO2, C1-6 (halo)alkyl, C1-6 alkoxy; n = 0-5] are prepared by cyclocondensation of benzene derivs. II (X, n, R1-R3 = same as above; R4 = C1-6 alkyl), followed by optional modification of the resulting products I (A = H; R1-R3, X, n = same as above). Thus, Et 2-methyl-2-[N-(2,4,6-trimethylphenylacetyl)methoxyamino]propionate was refluxed with Me3COK in THF for 10 min to give 84% I (A = H, R1 = R2 = R3 = Me, Xn = 2,4,6-Me3), which at 2000 g/ha showed 100% herbicidal activity on Digitaria adscendens and Setaria faberi.

IT **306944-55-8P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of pyrrolidines as herbicides)



RN 330151-54-7 CAPLUS
CN 2H-Pyrrol-2-one, 4-(acetyloxy)-1-(2,2-difluoroethoxy)-1,5-dihydro-5,5-dimethyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



L3 ANSWER 11 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:185730 CAPLUS
DOCUMENT NUMBER: 134:237482
TITLE: preparation of alkylphenylpyrazolines, -pyrroles, -furans, -thiophenes, and -thiazines as herbicides.
INVENTOR(S): Maetzke, Thomas; Stoller, Andre; Wendeborn, Sebastian; Szczepanski, Henry
PATENT ASSIGNEE(S): Syngenta Participations A.-G., Switz.
SOURCE: PCT Int. Appl., 135 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001017972	A2	20010315	WO 2000-EP8656	20000905
WO 2001017972	A3	20010927		

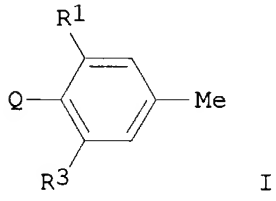
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,

LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2382435	AA	20010315	CA 2000-2382435		20000905
EP 1210333	A2	20020605	EP 2000-965923		20000905
EP 1210333	B1	20041117			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL					
AU 767356	B2	20031106	AU 2000-76503		20000905
PRIORITY APPLN. INFO.:			CH 1999-1642	A	19990907
			WO 2000-EP8656	W	20000905

OTHER SOURCE(S): MARPAT 134:237482

GI



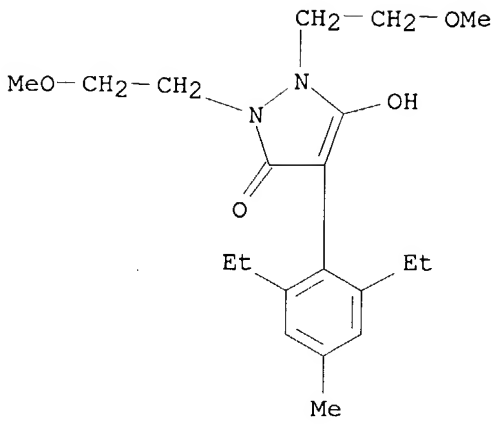
I

AB Title compds. [I; R1, R3 = Et, haloethyl, ethynyl, alkoxy, haloalkoxy, alkylcarbonyl, hydroxyalkyl, alkoxycarbonyl; Q = (substituted) dioxopyrazolinyl, dioxopyrrolyl, dioxofuranyl, dioxothienyl, dioxopyranyl, dioxothiazinyl, etc.] were prepared Thus, hexahydropyridazine dihydrobromide and Et3N in xylene were heated at 60° and then di-Et (4-methyl-2,6-diethylphenyl)malonate (analog preparation is given) was added followed by heating at 150° with distillation of Et3N and EtOH to give 2-(2,6-diethyl-4-methylphenyl)-tetrahydropyrazolo[1,2,a]pyridazine-1,3-dione, which was treated with Et3N in THF, DMAP and Me3CCOCl to give 5-oxo-3-pivaloyl-2(2,6-diethyl-4-methylphenyl)-tetrahydro-pyrazolo[1,2,a]pyridazine. Several I at 500 ppm preemergent and at 250 ppm postemergent gave 50-100% control of Alopecurus, Avena, Lolium, Setaria, Panicum, Sorghum, Digitaria, Echinocloa, and Brachiaria.

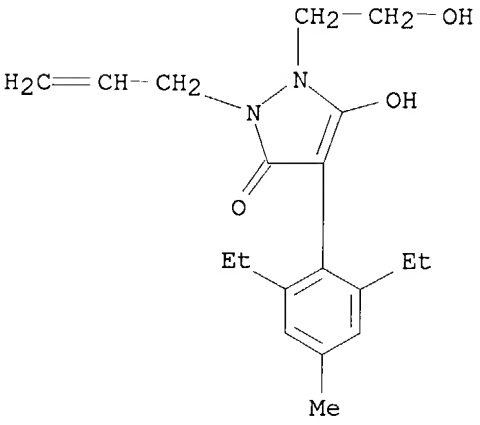
IT **329964-58-1P 329964-60-5P 329964-62-7P**
329964-67-2P 329964-68-3P 329964-72-9P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of alkylphenylpyrazolines, -pyrroles, -furans, -thiophenes, or -thiazines as herbicides)

RN 329964-58-1 CAPLUS

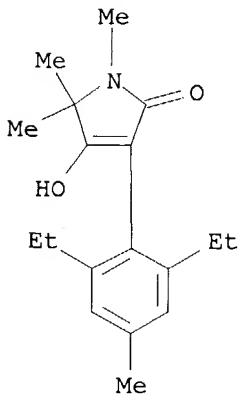
CN 3H-Pyrazol-3-one, 4-(2,6-diethyl-4-methylphenyl)-1,2-dihydro-5-hydroxy-1,2-bis(2-methoxyethyl)- (9CI) (CA INDEX NAME)



RN 329964-60-5 CAPLUS
CN 3H-Pyrazol-3-one, 4-(2,6-diethyl-4-methylphenyl)-1,2-dihydro-5-hydroxy-1-(2-hydroxyethyl)-2-(2-propenyl)- (9CI) (CA INDEX NAME)



RN 329964-62-7 CAPLUS
CN 2H-Pyrrol-2-one, 3-(2,6-diethyl-4-methylphenyl)-1,5-dihydro-4-hydroxy-1,5,5-trimethyl- (9CI) (CA INDEX NAME)

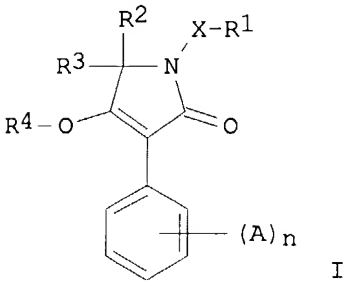


L3 ANSWER 12 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:814459 CAPLUS
DOCUMENT NUMBER: 133:362702
TITLE: Preparation of N-substituted 3-phenyl-2,5-dihydropyrrol-2-one derivatives as agrochemicals
INVENTOR(S): Mio, Shigeru; Ito, Mitsuru; Ichinose, Reiji; Okui, Hideshi; Iwasaki, Toshiaki; Kodama, Seiichiro; Iwabuchi, Jun
PATENT ASSIGNEE(S): Sankyo Co. Ltd., Japan; Nippon Kayaku Co., ltd.
SOURCE: PCT Int. Appl., 427 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000068196	A1	20001116	WO 2000-JP2848	20000428
W: AU, BR, CA, CN, CZ, HU, ID, IL, IN, KR, MX, NO, NZ, PL, RU, TR, US, ZA				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
JP 2001026578	A2	20010130	JP 2000-138032	20000511
JP 2001316362	A2	20011113	JP 2001-137610	20000511
JP 2002205984	A2	20020723	JP 2001-138063	20010509

PRIORITY APPLN. INFO.: JP 1999-130499 A 19990511
JP 2000-343070 A 20001110
JP 2000-138032 A3 20000511

OTHER SOURCE(S): MARPAT 133:362702
GI



I

AB N-Substituted dihydropyrrole derivs. represented by general formula (I) or salts thereof (wherein R1 is hydrogen, (un)substituted C1-6 alkyl, C3-7 cycloalkyl, (un)substituted C2-6 alkenyl, C2-6 alkynyl, (un)substituted Ph, (un)substituted 5- to 6-membered heterocyclyl, or the like; R2 and R3 are each independently hydrogen, (un)substituted C1-6 alkyl, C3-7 cycloalkyl, C2-6 alkenyl, C2-6 alkynyl, (un)substituted Ph, or (un)substituted 5- to 6-membered heterocyclyl, or alternatively R2 and R3 together with the carbon atom to which they are bonded may form (un)substituted 5- to 7-membered cycloalkane, cycloalkene, or cycloalkadiene; R4 is hydrogen, (un)substituted C2-10 alkylcarbonyl, C4-7 cycloalkylcarbonyl, C3-7 alkenylcarbonyl, benzoyl, 4- to 6-membered heterocyclylcarbonyl, C2-8 alkoxycarbonyl, C4-7 cycloalkoxycarbonyl, C3-7

alkenyloxycarbonyl, or the like; A is (un)substituted C1-6 alkyl, halo, (un)substituted C1-6 alkoxy, C1-6 alkylthio, C1-6 alkylsulfonyl, (un)substituted Ph, (un)substituted 5- to 6-membered heterocyclyl, or the like; n is an integer of 1 to 5; and X is oxygen, sulfur, sulfinyl or sulfonyl) are prepared These compds. exhibit excellent insecticidal, acaricidal, aphicidal, and herbicidal activity. Thus, 2,4,6-trimethylphenylacetic acid was condensed with 2-methoxyamino-2-methylpropionic acid Et ester in the presence of Et3N and 4-dimethylaminopyridine in CH2Cl2 at 0° for 1 h to give 41.0% 2-[N-methoxy-N-[(2,4,6-trimethylphenyl)acetyl]amino]-2-methylpropionic acid Et ester which was treated with potassium tert-butoxide in DMF at room temperature for 30 min to give 31.7% 5,5-dimethyl-4-hydroxy-1-methoxy-2-oxo-3-(2,4,6-trimethylphenyl)-2,5-dihydro-1H-pyrrole (II). II controlled 85% Plutella xylostella konaga larvae at 200 ppm 85% Nilaparvata lugens larvae at 10 ppm, and 100% adult Aphis gossypii at 200 ppm.

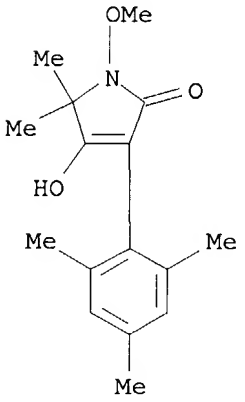
IT **306944-55-8P 306944-67-2P 306950-85-6P 306950-86-7P 306950-87-8P 306950-89-0P 306950-90-3P**

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of N-substituted phenyldihydropyrrolone derivs. as agrochems.)

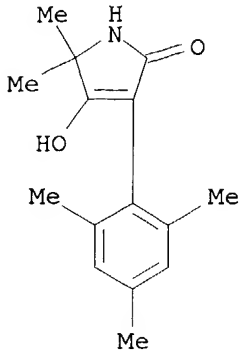
RN 306944-55-8 CAPLUS

CN 2H-Pyrrol-2-one, 1,5-dihydro-4-hydroxy-1-methoxy-5,5-dimethyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



RN 306944-67-2 CAPLUS

CN Carbonic acid, 1-(ethylthio)-2,5-dihydro-2,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl methyl ester (9CI) (CA INDEX NAME)

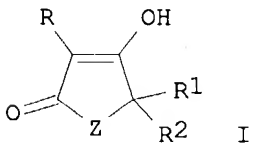


REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 13 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:607400 CAPLUS
DOCUMENT NUMBER: 133:193062
TITLE: Preparation of 2-aryl-4-hydroxy-2,5-dihydro-2-furanones and analogs
INVENTOR(S): Lieb, Folker; Fischer, Reiner; Graff, Alan
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Ger. Offen., 8 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19908699	A1	20000831	DE 1999-19908699	19990226
PRIORITY APPLN. INFO.:			DE 1999-19908699	19990226

OTHER SOURCE(S): CASREACT 133:193062; MARPAT 133:193062
GI

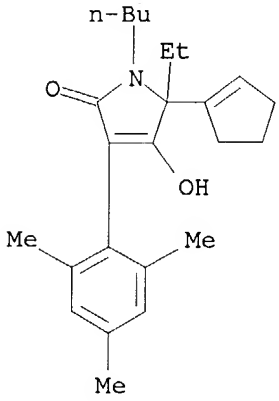


I

AB Title compds. [I; R = (un)substituted Ph; R1 = H, (un)substituted (cyclo)alkyl, -(hetero)aryl; R2 = CR3:CHR4; R3 = H, halo, (un)substituted cycloalkyl; R4 = H or (un)substituted alkyl; R1R4,R3R4 = atoms to complete a ring; Z = O, S, [(ar)alkyl]imino] were prepared by cyclocondensation of RC(COCl):C:O with R1C(:Z)CHR3CH2R4. Thus, 2,4,6-trimethylphenylchlorocarbonylketene was refluxed 8h with Me cyclopentyl ketone to give 60% I (R = 2,4,6-trimethylphenyl, R1 = Me, R2 = 1-cyclopentenyl).

IT **289673-07-0P**
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(preparation of 2-aryl-4-hydroxy-2,5-dihydro-2-furanones and analogs)

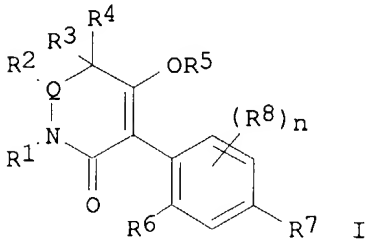
RN 289673-07-0 CAPLUS
CN 2H-Pyrrol-2-one, 1-butyl-5-(1-cyclopenten-1-yl)-5-ethyl-1,5-dihydro-4-hydroxy-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



L3 ANSWER 14 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:365693 CAPLUS
DOCUMENT NUMBER: 131:44838
TITLE: Preparation of six-membered nitrogen heterocycles and agrochemicals containing them
INVENTOR(S): Manabe, Hiroshi; Hayashi, Masatoshi
PATENT ASSIGNEE(S): Ohtsuka Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11152273	A2	19990608	JP 1997-318614	19971119
PRIORITY APPLN. INFO.:			JP 1997-318614	19971119
OTHER SOURCE(S):	MARPAT 131:44838			

GI



I

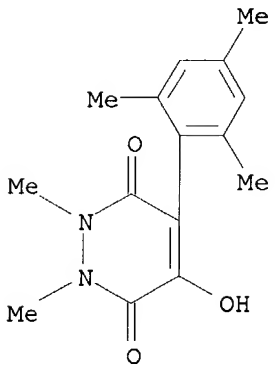
AB The heterocycles I [R1, R2 = H, C1-10 alkyl, (halo)phenyl or R1R2 = C3-6 (un)saturated hydrocarbylene thereby forming a ring; R3, R4 = C1-4 alkyl or R3R4 = C3-6 (un)saturated hydrocarbylene thereby forming a ring or R3R4 = O; R5 = H, C1-4 alkyl, C1-8 acyl, Bz, C1-4 alkoxycarbonyl, COPh, CONR9R10

(R9, R10 = C1-4 alkyl), C1-4 alkylsulfonyl; R6-R8 = H, C1-4 alkyl, halo; Q = CH, N; n = 1-3] are prepared Acaricides, insecticides, and herbicides containing ≥1 I are also claimed. A toluene solution of Et 1-[1,2-dimethyl-2-(2,4,6-trimethylphenyl)acetylhydrazino]cyclohexanecarboxylate (preparation given) was added dropwise to a THF solution of Me3COK and the reaction mixture was refluxed for 1 h to give 97% 5-hydroxy-1,2-dimethyl-4-(2,4,6-trimethylphenyl)-1,2-diazaspiro[5.5]-4-undecen-3-one, which was treated with AcCl in CH2Cl2 containing Et3N for 1 h to give 62% its 5-acetate (II). II showed ≥50% insecticidal activity against Myzus persicae on cabbage. Agrochem. prepns. of I were also formulated.

IT **227203-32-9P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of phenylpyridazinediones or phenylpiperidinediones as acaricides, insecticides, or herbicides)

RN 227203-32-9 CAPLUS

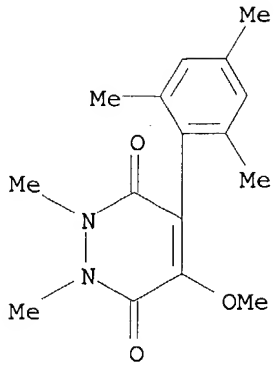
CN 3,6-Pyridazinedione, 1,2-dihydro-4-hydroxy-1,2-dimethyl-5-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



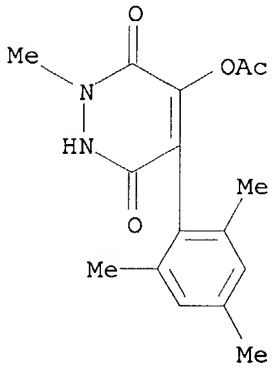
IT **227203-31-8P 227203-42-1P 227203-50-1P**
227203-58-9P 227203-59-0P 227203-60-3P
227203-61-4P 227203-62-5P 227203-63-6P
227203-64-7P 227203-65-8P 227203-66-9P
227203-67-0P 227203-68-1P 227203-69-2P
227203-70-5P 227203-71-6P 227203-72-7P
227203-73-8P 227203-74-9P 227203-75-0P
227203-92-1P 227203-93-2P 227203-94-3P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of phenylpyridazinediones or phenylpiperidinediones as acaricides, insecticides, or herbicides)

RN 227203-31-8 CAPLUS

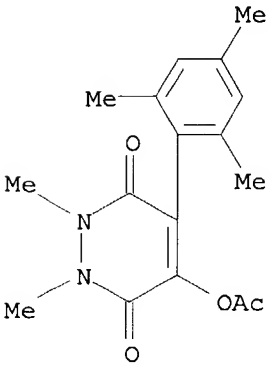
CN 3,6-Pyridazinedione, 1,2-dihydro-4-methoxy-1,2-dimethyl-5-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



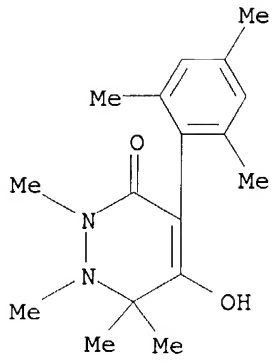
RN 227203-42-1 CAPLUS
CN 3,6-Pyridazinedione, 5-(acetyloxy)-1,2-dihydro-1-methyl-4-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



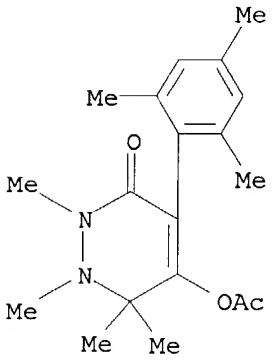
RN 227203-50-1 CAPLUS
CN 3,6-Pyridazinedione, 4-(acetyloxy)-1,2-dihydro-1,2-dimethyl-5-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



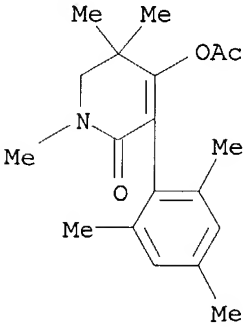
RN 227203-58-9 CAPLUS
CN 3,6-Pyridazinedione, 1-(1,1-dimethylethyl)-1,2-dihydro-5-hydroxy-2-methyl-4-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



RN 227203-93-2 CAPLUS
CN 3(2H)-Pyridazinone, 5-(acetyloxy)-1,6-dihydro-1,2,6,6-tetramethyl-4-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



RN 227203-94-3 CAPLUS
CN 2(1H)-Pyridinone, 4-(acetyloxy)-5,6-dihydro-1,5,5-trimethyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

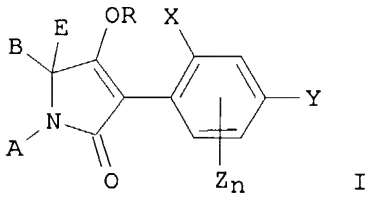


L3 ANSWER 15 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:621075 CAPLUS
DOCUMENT NUMBER: 129:256472
TITLE: Preparation of 3-aryl-pyrrolidine-2,4-dione derivatives as pesticides.
INVENTOR(S): Bertram, Heinz-Jurgen; Fischer, Reiner; Kruger,

Bernd-Wieland; Erdelen, Christoph; Lurssen, Klaus; Schmidt, Robert R.; Santel, Hans-Joachim
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: U.S., 29 pp., Cont.-in-part of U.S. Ser. No. 652,348, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5811374	A	19980922	US 1995-483340	19950607
DE 4004496	A1	19910822	DE 1990-4004496	19900214
PRIORITY APPLN. INFO.:			DE 1990-4004496 A	19900214
			US 1991-652348 B2	19910207

OTHER SOURCE(S): MARPAT 129:256472
GI



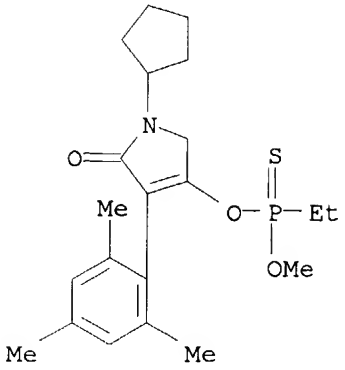
I

AB The 3-arylpyrrolidine-2,4-dione derivs. I [ANCB = (CH2)2-6, uninterrupted or interrupted with S, SO or SO2; E, Z = H or (alkoxy)alkyl; X = alkyl, alkoxy or halo; Y = H, (halo)alkyl, halo or alkoxy; n= 1-3; R = P(:L)R1R2, SO2R3, C(:L)NR4R5 or C(:L)MR6; L, M = O or S; R1, R2, R3 = (un)substituted alkyl, alkoxy, alkylamino, alkylthio, Ph, benzyl, etc.; R4, R5 = H, (un)substituted alkyl, alkenyl, alkoxy, Ph, etc.; R6 = (halo)alkyl, Ph, etc.] are prepared as insecticides, acaricides, and herbicides.

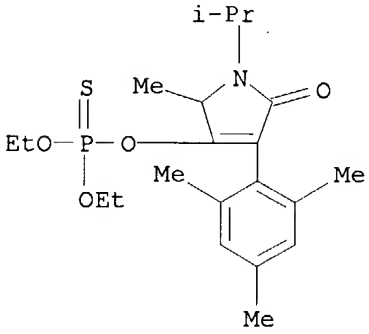
IT **136732-45-1P 136732-46-2P 136732-47-3P**
136732-48-4P 136732-49-5P 136732-50-8P
136732-76-8P 136757-48-7P 213331-58-9P
213331-59-0P 213331-60-3P 213331-61-4P
213331-62-5P 213331-63-6P 213331-64-7P
213331-65-8P 213331-66-9P 213331-67-0P
RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation as insecticide, acaricide and herbicide)

RN 136732-45-1 CAPLUS

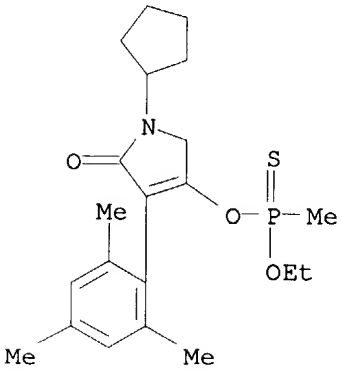
CN Phosphonothioic acid, ethyl-, O-[1-cyclopentyl-2,5-dihydro-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl] O-methyl ester (9CI) (CA INDEX NAME)



RN 136732-46-2 CAPLUS
CN Phosphorothioic acid, O-[2,5-dihydro-2-methyl-1-(1-methylethyl)-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl] O,O-diethyl ester (9CI) (CA INDEX NAME)

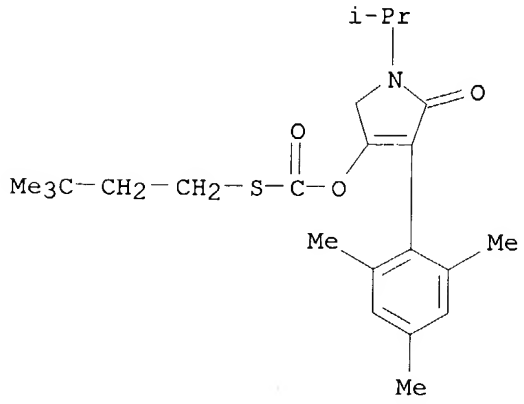


RN 136732-47-3 CAPLUS
CN Phosphonothioic acid, methyl-, O-[1-cyclopentyl-2,5-dihydro-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl] O-ethyl ester (9CI) (CA INDEX NAME)

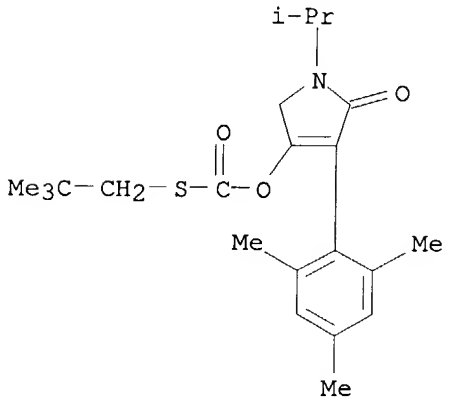


RN 136732-48-4 CAPLUS
CN Phosphonothioic acid, methyl-, O-[1-cyclopentyl-2,5-dihydro-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl] O-(1-methylethyl) ester (9CI) (CA INDEX NAME)

RN 213331-66-9 CAPLUS
CN Carbonothioic acid, O-[2,5-dihydro-1-(1-methylethyl)-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl] S-(3,3-dimethylbutyl) ester (9CI) (CA INDEX NAME)



RN 213331-67-0 CAPLUS
CN Carbonothioic acid, O-[2,5-dihydro-1-(1-methylethyl)-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl] S-(2,2-dimethylpropyl) ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 16 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:402444 CAPLUS
DOCUMENT NUMBER: 129:67712
TITLE: Preparation of spiro[tetrahydropyran-3,2'-pyrrolidine-3,5-dione] derivatives and analogs as herbicides and pesticides
INVENTOR(S): Hagemann, Hermann; Fischer, Reiner; Bretschneider, Thomas; Erdelen, Christoph; Wachendorff-Neumann, Ulrike; Dahmen, Peter; et al.
PATENT ASSIGNEE(S): Bayer A.-G., Germany; Hagemann, Hermann; Fischer, Reiner; Bretschneider, Thomas; Erdelen, Christoph
SOURCE: PCT Int. Appl., 135 pp.
CODEN: PIXXD2

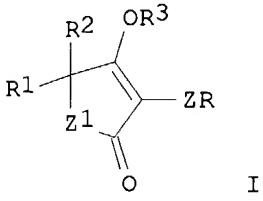
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9825928	A1	19980618	WO 1997-EP6708	19971201
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
DE 19651686	A1	19980618	DE 1996-19651686	19961212
AU 9855595	A1	19980703	AU 1998-55595	19971201
EP 944633	A1	19990929	EP 1997-952026	19971201
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
CN 1240449	A	20000105	CN 1997-180627	19971201
CN 1130366	B	20031210		
BR 9714470	A	20000516	BR 1997-14470	19971201
JP 2001505892	T2	20010508	JP 1998-526161	19971201
MX 9905063	A	20000228	MX 1999-5063	19990601
US 6288102	B1	20010911	US 1999-319489	19990604
US 6391912	B1	20020521	US 2001-895649	20010629
US 2002072617	A1	20020613		
US 2002161034	A1	20021031	US 2002-59094	20020128
US 6630594	B2	20031007		

PRIORITY APPLN. INFO.:

DE 1996-19651686	A	19961212
WO 1997-EP6708	W	19971201
US 1999-319489	A3	19990604
US 2001-895619	A3	20010629

OTHER SOURCE(S): MARPAT 129:67712
GI



I

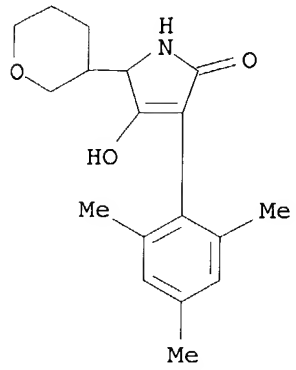
AB Title compds. [I; R1R2 = CH2O(CH2)3 throughout][II; R = halo, alkyl, alkoxy, (un)substituted Ph, etc.; R3 = H, acyl, NH4, metal ion; Z = (un)substituted 1,2-phenylene; Z1 = O, S, NH] were prepared Thus, tetrahydropyran-3-one was treated with NH3/NaCN and the product N-acylated by mesitylacetyl chloride to give R1R2C(CN)NHCOCH2ZMe (Z = 4,6-dimethyl-1,2-phenylene) which was hydrolyzed and the esterified product cyclized to give II (R = Me, R3 = H, Z = 4,6-dimethyl-1,2-phenylene, Z1 = NH). Data for biol. activity of I were given.

IT **209111-07-9P 209111-24-0P 209111-25-1P**
209111-36-4P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic

preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of spiro[tetrahydropyran-3,2'-pyrrolidine-3,5-dione] derivs. and analogs as herbicides and pesticides)

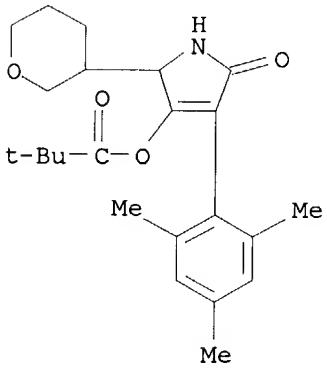
RN 209111-07-9 CAPLUS

CN 2H-Pyrrol-2-one, 1,5-dihydro-4-hydroxy-5-(tetrahydro-2H-pyran-3-yl)-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



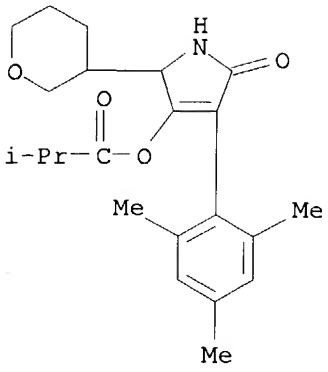
RN 209111-24-0 CAPLUS

CN Propanoic acid, 2,2-dimethyl-, 2,5-dihydro-5-oxo-2-(tetrahydro-2H-pyran-3-yl)-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)

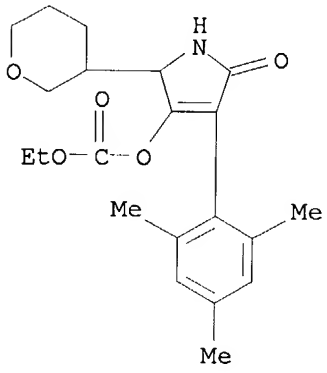


RN 209111-25-1 CAPLUS

CN Propanoic acid, 2-methyl-, 2,5-dihydro-5-oxo-2-(tetrahydro-2H-pyran-3-yl)-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)



RN 209111-36-4 CAPLUS
CN Carbonic acid, 2,5-dihydro-5-oxo-2-(tetrahydro-2H-pyran-3-yl)-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 17 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1998:208540 CAPLUS
DOCUMENT NUMBER: 128:257333
TITLE: Preparation of heterocyclic compounds as new antidotes in herbicidal compositions
INVENTOR(S): Tobler, Hans; Szczepanski, Henry; Fory, Werner
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Tobler, Hans; Szczepanski, Henry; Fory, Werner
SOURCE: PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9813361	A1	19980402	WO 1997-EP5252	19970924

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG,

US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9747780	A1	19980417	AU 1997-47780		19970924
EP 929543	A1	19990721	EP 1997-910351		19970924
EP 929543	B1	20011031			
R: DE, FR, GB					
ZA 9708579	A	19980326	ZA 1997-8579		19970925
US 6294504	B1	20010925	US 1999-269453		19990624
PRIORITY APPLN. INFO.:			CH 1996-2359	A	19960926
			WO 1997-EP5252	W	19970924

OTHER SOURCE(S): MARPAT 128:257333
GI

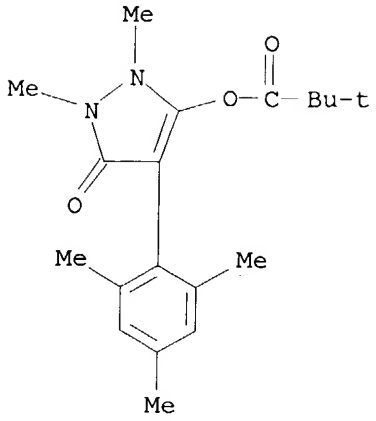
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; R1 = H, C1-4 alkyl, NO2, etc.; R2 = H, halo, CF3, etc.; R3 = H, halo, C1-4 alkyl; U, V, W and Z = O, S, C(O), etc., with the proviso that at least one of U, V, W or Z = C(O), and one ring member which is adjacent to this or these ring members signifies the group C:CHOC(R4)(R5)C(O)A; and two adjacent ring members U and V, V and W, and W and Z can not simultaneously signify O; R4, R5 = H, C1-8 alkyl; R4R5 = C2-6 alkylene; A = YR7, NR18R19; Y = O, S; R7 = H, C1-8 alkyl, C1-8-haloalkyl, etc.; R18 = H, C1-8 alkyl, Ph, etc.; R19 = H, C1-8 alkyl, C3-6 alkenyl, C3-6 alkynyl; R18R19 = C4-5 alkylene; m = 0-2], useful as antidotes in herbicidal compns. for the control of weeds and grasses in useful plant cultivations, as well as compns. having selective herbicide activity, which contain the compound I, and as herbicides the compds. of formulas II-VII (wherein W0, R21, Z0, B, n, R22-R24, E, R31-R35, A1, B1, A2, B2, R36, G, R48 and R49 have the significances given in the description), were prepared Treatment of 3H-2-benzopyran-3-one-1,4-dihydro-4-hydroxymethylene with NaH in DMF followed by addition of bromoacetic acid Me ester afforded compound I [R1-R3 = H; U = CH2; V = O; m = 1; W = C(O); Z = C:CHOCH2CO2Me] which showed post-emergent phytotoxic activity of 6 in a nine-stage appraisal scale (1 = complete damage, 9 = no effect) when used as antidote at 250 g/ha in mixture with clodinafop (5 g/ha) on maize.

IT **178177-66-7**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)
(preparation of heterocyclic compds. as new antidotes in herbicidal compns.)

RN 178177-66-7 CAPLUS

CN Propanoic acid, 2,2-dimethyl-, 2,5-dihydro-1,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrazol-3-yl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

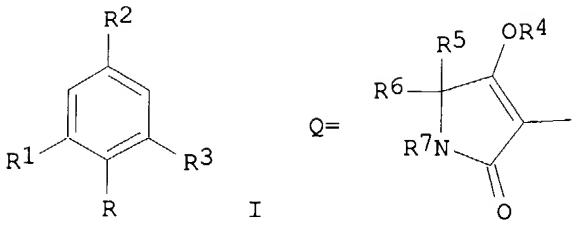
L3 ANSWER 18 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:577745 CAPLUS
DOCUMENT NUMBER: 125:221568
TITLE: Preparation of 3-phenyl-2,4-dioxopyrrolidine tautomers and analogs as herbicides and pesticides
INVENTOR(S): Fischer, Reiner; Bretschneider, Thomas; Hagemann, Hermann; Lieb, Folker; Lui, Norbert; Ruther, Michael; Widdig, Arno; Erdelen, Christoph; Wachendorff-Neumann, Ulrike; et al.
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Ger. Offen., 94 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19543864	A1	19960814	DE 1995-19543864	19951124
WO 9625395	A1	19960822	WO 1996-EP382	19960131
W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, HU, JP, KR, KZ, LK, MX, NO, NZ, PL, RO, RU, SK, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9647158	A1	19960904	AU 1996-47158	19960131
BR 9606956	A	19971028	BR 1996-6956	19960131
EP 809629	A1	19971203	EP 1996-902951	19960131
EP 809629	B1	20040630		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
CN 1173866	A	19980218	CN 1996-191907	19960131
JP 11500114	T2	19990106	JP 1996-524608	19960131
ZA 9601107	A	19960828	ZA 1996-1107	19960212
US 6358887	B1	20020319	US 1997-875872	19970805
US 2003045432	A1	20030306	US 2001-14713	20011211
US 6746990	B2	20040608		

PRIORITY APPLN. INFO.:

DE 1995-19504621	A1	19950213
DE 1995-19543864	A	19951124
WO 1996-EP382	W	19960131
US 1997-875872	A3	19970805

OTHER SOURCE(S): MARPAT 125:221568
GI



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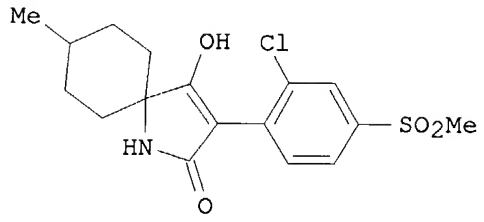


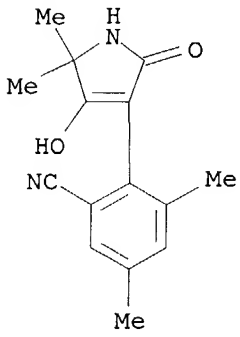
II

AB Title compds. [I; R = oxopyrrolinyl group Q; R1 = halo, alkyl, alkoxy, Ph, etc.; R2,R3 = H, halo, alkyl, alkoxy, etc.; R4 = H, alkanoyl, alkoxycarbonyl, etc.; R5 = H, alkyl, (hetero)aryl, etc.; R6 = H, (alkoxy)alkyl; R5R6 = atoms to form a ring; R7 = H, alkyl, (hetero)aryl, etc.; R6R7 = atoms to form a ring] were prepared Thus, 2,4-Cl(MeO2S)C6H3Me was converted in 3 steps to 2,4-Cl(MeO2S)C6H3CH2CO2H which was amidated by Me 1-amino-4-methylcyclohexanecarboxylate and the product cyclized to give title compound II. The latter gave complete control of Nephotettix cinciteps on rice seedlings at 0.1%.

IT **181299-83-2P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 3-phenyl-2,4-dioxopyrrolidine tautomers and analogs as herbicides and pesticides)

RN 181299-83-2 CAPLUS

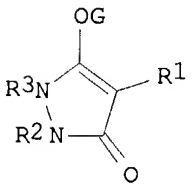
CN Benzonitrile, 2-(2,5-dihydro-4-hydroxy-5,5-dimethyl-2-oxo-1H-pyrrol-3-yl)-3,5-dimethyl- (9CI) (CA INDEX NAME)



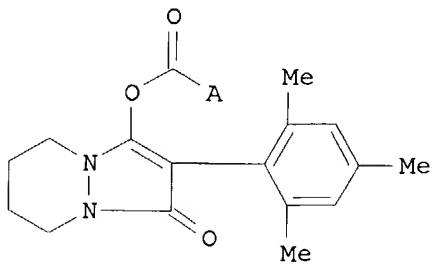
ACCESSION NUMBER: 1996:546334 CAPLUS
DOCUMENT NUMBER: 125:195643
TITLE: 4-Aryl- and 4-heteroaryl-5-oxopyrazoline derivatives having pesticidal properties
INVENTOR(S): Boeger, Manfred; Maienfisch, Peter; Cederbaum, Fredrik; Pitterna, Thomas; Nadkarni, Pradeep Jeevaji; Ekkundi, Vadiraj Subbanna; Kulkarni, Surendra Umesh
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: PCT Int. Appl., 101 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9621652	A1	19960718	WO 1995-EP5152	19951229
W: AL, AM, AU, AZ, BB, BG, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TT, UA, US, UZ, VN				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2210286	AA	19960718	CA 1995-2210286	19951229
AU 9644353	A1	19960731	AU 1996-44353	19951229
EP 804422	A1	19971105	EP 1995-943223	19951229
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, PT, IE				
CN 1175248	A	19980304	CN 1995-197652	19951229
JP 10512248	T2	19981124	JP 1995-521407	19951229
ZA 9600243	A	19960819	ZA 1996-243	19960112
BR 9600088	A	19980127	BR 1996-88	19960112
PRIORITY APPLN. INFO.:			CH 1995-108	19950113
			WO 1995-EP5152	19951229

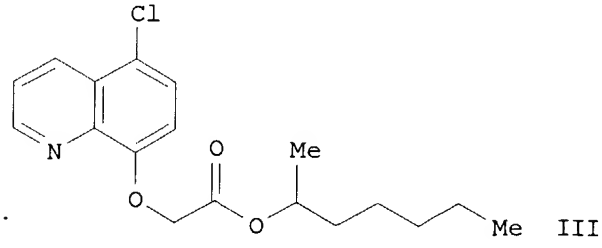
OTHER SOURCE(S): MARPAT 125:195643
GI



I



II



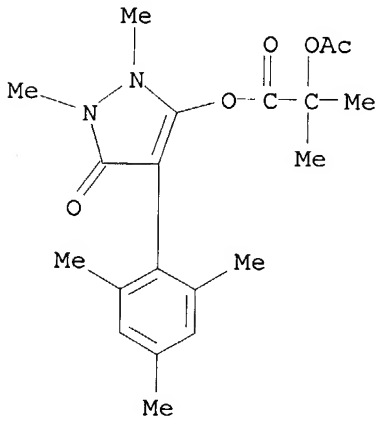
III

AB The invention relates to novel, pesticidally effective title compds. I [R1 = (un)substituted Ph, pyridinyl, or naphthyl; R2R3 = atoms to form (un)saturated, (un)substituted, (poly)cyclic system with optional addnl. non-terminal heteroatoms; G = -COA or -SO2B; A = (un)substituted alkyl, cycloalkyl, cycloalkoxy, adamantyl, naphthyl, etc.; B = (halo)alk(en/yn)yl, (halo)alkoxy, (halo)cycloalkyl, (un)substituted benzyl or naphthyl, substituted or cyclic amino]. Also disclosed are their compns., use as insecticides, acaricides, or herbicides, especially in crops of useful plants, and selective herbicidal compns. comprising compds. I with certain quinoline, pyrazole, or triazole-based safeners. For example, reaction of 3-hydroxy-4-mesityl-5-oxo-1,2-tetramethylenepyrazoline with (2-cyanoethyl)methylcarbamoyl chloride in THF in the presence of Et3N gave title compound II [A = NMeCH2CH2CN]. The latter at 400 ppm gave >80% control of mixed stages of Tetranychus urticae. The similarly prepared compound II [A = CMe2OCOBu-tert] at 2 kg/ha preemergence gave complete control of Avena and Setaria. Useful safeners, e.g. for maize or cereals, include compound III.

IT **180799-97-7P 180799-98-8P 180800-04-8P**
180800-12-8P 180800-15-1P 180800-24-2P
180800-25-3P 180800-37-7P 180800-75-3P
180800-76-4P 180800-87-7P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyrazoline derivs. as pesticides)

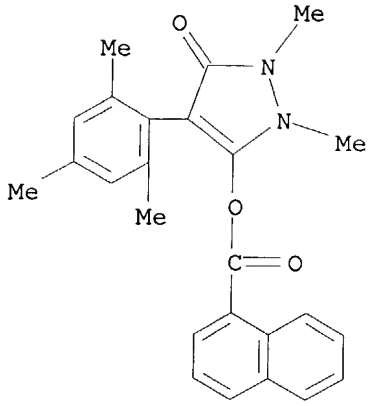
RN 180799-97-7 CAPLUS

CN Propanoic acid, 2-(acetyloxy)-2-methyl-, 2,5-dihydro-1,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrazol-3-yl ester (9CI) (CA INDEX NAME)

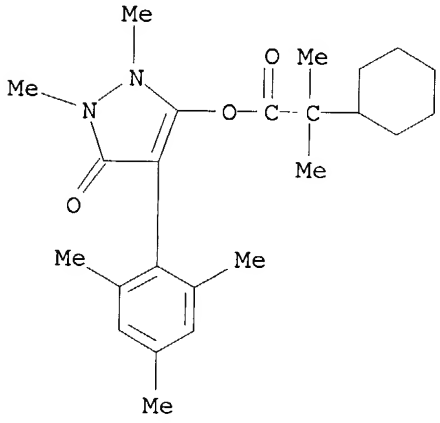


RN 180799-98-8 CAPLUS

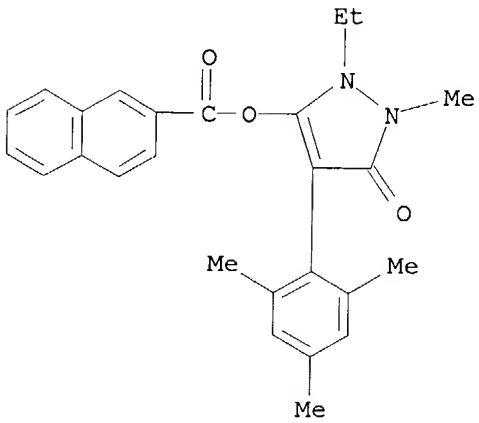
CN 1-Naphthalenecarboxylic acid, 2,5-dihydro-1,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrazol-3-yl ester (9CI) (CA INDEX NAME)



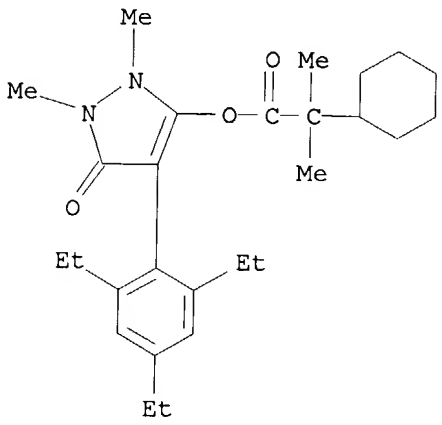
RN 180800-04-8 CAPLUS
CN Cyclohexaneacetic acid, α,α-dimethyl-, 2,5-dihydro-1,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrazol-3-yl ester (9CI) (CA INDEX NAME)



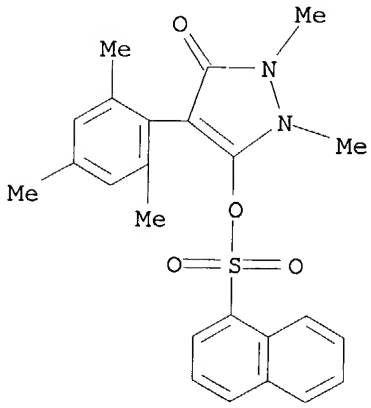
RN 180800-12-8 CAPLUS
CN 2-Naphthalenecarboxylic acid, 2-ethyl-2,5-dihydro-1-methyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrazol-3-yl ester (9CI) (CA INDEX NAME)



CN Cyclohexaneacetic acid, α,α-dimethyl-, 2,5-dihydro-1,2-dimethyl-5-oxo-4-(2,4,6-triethylphenyl)-1H-pyrazol-3-yl ester (9CI) (CA INDEX NAME)



RN 180800-87-7 CAPLUS
CN 1-Naphthalenesulfonic acid, 2,5-dihydro-1,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrazol-3-yl ester (9CI) (CA INDEX NAME)



L3 ANSWER 20 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:388344 CAPLUS
DOCUMENT NUMBER: 125:51494
TITLE: Safened herbicidal compositions
INVENTOR(S): Glock, Jutta; Hudetz, Manfred; Kerber, Elmar
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: PCT Int. Appl., 105 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

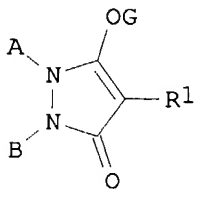
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9611574	A1	19960425	WO 1995-EP3935	19951005

W: AL, AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TT, UA, US, UZ, VN
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

CA 2199636	AA	19960425	CA 1995-2199636	19951005
AU 9536536	A1	19960506	AU 1995-36536	19951005
EP 786937	A2	19970806	EP 1995-934134	19951005
R: AT, BE, CH, DE, ES, FR, GB, GR, LI, NL, PT				
BR 9509374	A	19971230	BR 1995-9374	19951005
JP 10507189	T2	19980714	JP 1995-512904	19951005
ZA 9508712	A	19960710	ZA 1995-8712	19951016
PRIORITY APPLN. INFO.:			CH 1994-3120	19941017
			WO 1995-EP3935	19951005

OTHER SOURCE(S): CASREACT 125:51494; MARPAT 125:51494

GI



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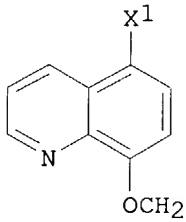


II

AB Selective herbicidal compns. for controlling grasses and weeds in crops comprise a herbicide and an antidote. The herbicide is I [R1 = (un)substituted Ph, naphthyl or pyridinyl etc.; A, B = H, alkyl, alkenyl, alkynyl, alkoxyalkyl, alkylthioalkyl, cycloalkyl, (un)substituted aryl; AB = divalent radical of a saturated or unsatd. (un)substituted mono-, bi-, tri- or polycyclic system; G = H, COR2, etc.; R2 = haloalkyl, haloalkenyl, etc.]. 2-(2,4,6-Trimethylphenyl)-5,6,7,8-tetrahydro-1H-pyrazolo[1,2-a]pyridazine-1,3(2H)dione (preparation given) is an example. The antidotes are quinoline derivs. II [R2 = H, (un)substituted alkyl, etc.; X1 = H or Cl] or 1-phenylazole-3-carboxylic acid derivs. (Markush given).

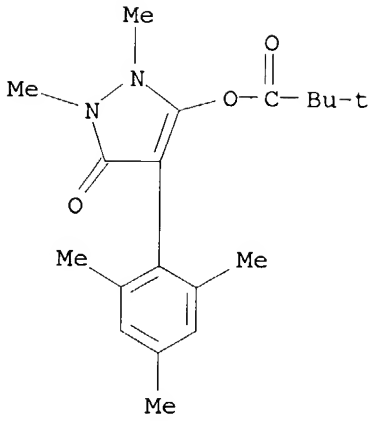
IT **178177-67-8**
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(safener herbicidal composition)

RN 178177-67-8 CAPLUS

CN Propanoic acid, 2,2-dimethyl-, 2,5-dihydro-1,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrazol-3-yl ester, compd. with 1-methylhexyl [(5-chloro-8-quinolinyl)oxy]acetate (1:1) (9CI) (CA INDEX NAME)

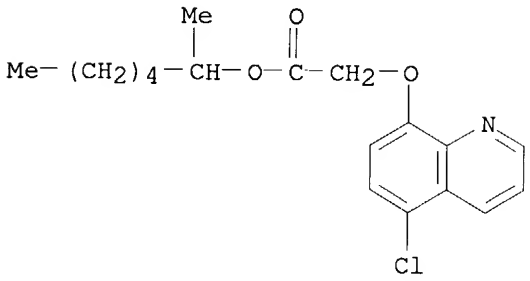
CM 1

CRN 178177-66-7
CMF C19 H26 N2 O3



CM 2

CRN 99607-70-2
CMF C18 H22 Cl N O3



L3 ANSWER 21 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1996:194724 CAPLUS
DOCUMENT NUMBER: 124:231916
TITLE: 2-Aryl-1,3-cyclopentanedione Derivatives, Methods for Their Preparation and Their Uses as Pesticides
INVENTOR(S): Fischer, Reiner; Dumas, Jacques; Bretschneider, Thomas; Erdelen, Christoph; Wachendorff-Neumann, Ulrike; Santel, Hans-Joachim; Dollinger, Markus; Mencke, Norbert; Turberg, Andreas
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Ger. Offen., 97 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19518962	A1	19960111	DE 1995-19518962	19950523
WO 9601798	A1	19960125	WO 1995-EP2482	19950626

W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, HU, JP, KR, KZ, LK, MX, NO, NZ, PL, RO, RU, SK, UA, US

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
AU 9529251	A1	19960209	AU 1995-29251		19950626
EP 769001	A1	19970423	EP 1995-924938		19950626
EP 769001	B1	20000719			
R: BE, CH, DE, ES, FR, GB, IT, LI, NL					
BR 9508247	A	19971223	BR 1995-8247		19950626
JP 10504537	T2	19980506	JP 1995-504079		19950626
EP 987246	A1	20000322	EP 1999-123926		19950626
EP 987246	B1	20040908			
R: BE, CH, DE, ES, FR, GB, IT, LI, NL					
ES 2150575	T3	20001201	ES 1995-924938		19950626
US 5840661	A	19981124	US 1996-765429		19961231
US 6150304	A	20001121	US 1998-131043		19980806
PRIORITY APPLN. INFO.:			DE 1994-4423943	A1	19940707
			DE 1995-19502815	A1	19950130
			DE 1995-19518962	A	19950523
			EP 1995-924938	A3	19950626
			WO 1995-EP2482	W	19950626
			US 1996-765429	A3	19961231

OTHER SOURCE(S): MARPAT 124:231916

AB The title compds., 2-phenyl-1,3-cyclopentanedione derivs., were prepared; also claimed were the corresponding enones, i.e., 3-hydroxy-2-phenyl-2-cyclopenten-1-one derivs. Many specifically tested compds. were derivs. of spiro[4.5]dec-2-en-1-one. The uses of these compds. as pesticides and herbicides was claimed. An example compound, 2-(2,4-dichlorophenyl)-4-hydroxyspiro[4.5]dec-2-en-1-one was prepared by cyclocondensation of 1-[3-(2,4-dichlorophenyl)-2-oxopropyl]cyclohexanecarboxylic acid Me ester.

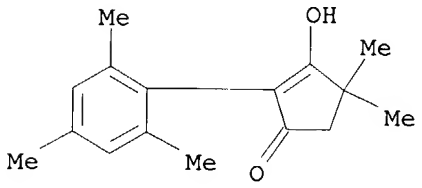
IT **174827-99-7P**

RL: AGR (Agricultural use); BUU (Biological use, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of (aryl)cyclopentanediones and (aryl)hydroxycyclopentenones as pesticides and herbicides)

RN 174827-99-7 CAPLUS

CN 2-Cyclopenten-1-one, 3-hydroxy-4,4-dimethyl-2-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



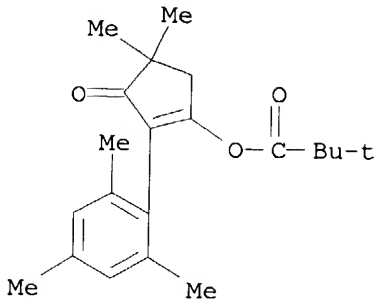
IT **174828-25-2P 174828-26-3P 174828-34-3P**

RL: AGR (Agricultural use); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

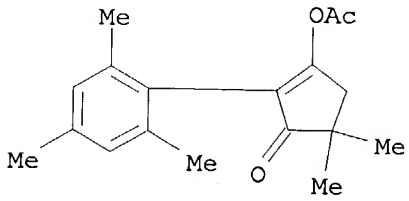
(preparation of (aryl)cyclopentanediones and (aryl)hydroxycyclopentenones as pesticides and herbicides)

RN 174828-25-2 CAPLUS

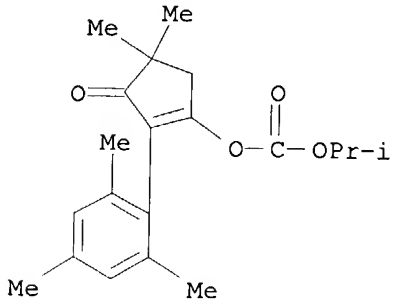
CN Propanoic acid, 2,2-dimethyl-, 4,4-dimethyl-3-oxo-2-(2,4,6-trimethylphenyl)-1-cyclopenten-1-yl ester (9CI) (CA INDEX NAME)



RN 174828-26-3 CAPLUS
CN 2-Cyclopenten-1-one, 3-(acetyloxy)-5,5-dimethyl-2-(2,4,6-trimethylphenyl)-(9CI) (CA INDEX NAME)



RN 174828-34-3 CAPLUS
CN Carbonic acid, 4,4-dimethyl-3-oxo-2-(2,4,6-trimethylphenyl)-1-cyclopenten-1-yl 1-methylethyl ester (9CI) (CA INDEX NAME)

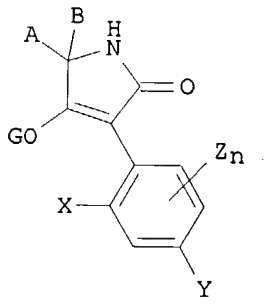


L3 ANSWER 22 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:264619 CAPLUS
DOCUMENT NUMBER: 122:55885
TITLE: Preparation of 3-phenyl-5-cycloalkylpyrrolidin-2,4-diones as pesticides and herbicides.
INVENTOR(S): Fischer, Reiner; Bretschneider, Thomas; Krueger, Bernd-Wieland; Santel, Hans-Joachim; Dollinger, Markus; Turberg, Andreas; Wachendorff-Neumann, Ulricke
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Eur. Pat. Appl., 150 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German

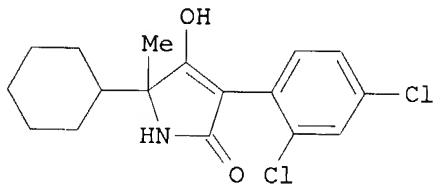
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 613885	A2	19940907	EP 1994-102324	19940216
EP 613885	A3	19941130		
EP 613885	B1	20010919		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
DE 4306257	A1	19940908	DE 1993-4306257	19930301
ES 2164075	T3	20020216	ES 1994-102324	19940216
US 5567671	A	19961022	US 1994-200139	19940222
JP 06256307	A2	19940913	JP 1994-51033	19940225
JP 3279804	B2	20020430		
BR 9400755	A	19941101	BR 1994-755	19940228
PRIORITY APPLN. INFO.:			DE 1993-4306257 A	19930301

OTHER SOURCE(S): MARPAT 122:55885
GI



I



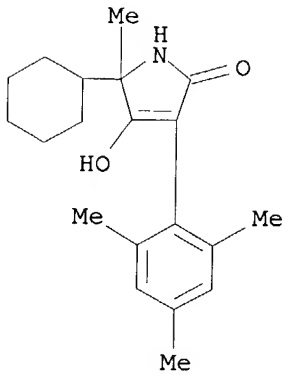
II

AB Title compds. [I; A = (substituted) cycloalkyl; B = H, (substituted) alkyl; X = alkyl, halo, alkoxy; Y = H, alkyl, halo, alkoxy, haloalkyl; Z = alkyl, halo, alkoxy; n = 0-3; G = H, COR1, SO2R3, C(:L)NR6R7, etc.; L = O, S; R1 = (halo-substituted) (heteroatom-interrupted) alkyl, alkenyl, alkoxyalkyl, alkylthioalkyl, cycloalkyl, (substituted) Ph, phenylalkyl, heteroaryl, phenoxyalkyl, heteroarylalkyl; R3 = (halo-substituted) alkyl, alkoxy, cycloalkoxy, alkylamino, dialkylamino, alkylthio, alkenylthio, cycloalkylthio, (substituted) Ph, PhO, PhCH2O, PhS; R6, R7 = H, (halo-substituted) alky,l alkenyl, alkoxy, alkoxyalkyl, (substituted) Ph, PhCH2; NR6R7 = (O- or S-interrupted) ring], were prepared Thus, N-(2,4-dichlorophenylacetyl)-2-cyclohexylalanine Me ester (preparation given) was refluxed with KOCMe3 in THF to give 70% title compound II. Several I at 125 g/ha preemergent gave ≥80% control of Digitara while being very well-tolerated by sugar beets.

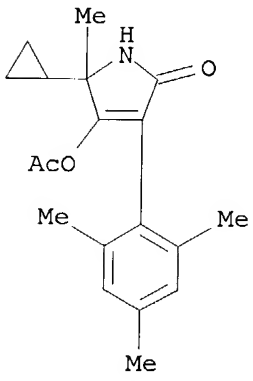
IT **159881-30-8P 159881-36-4P 159881-37-5P**
159881-40-0P 159881-41-1P 159881-48-8P
159881-49-9P 159881-51-3P 159881-52-4P
159881-53-5P 159881-56-8P 159881-57-9P
159881-58-0P 159881-59-1P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 3-phenyl-5-cycloalkylpyrrolidin-2,4-diones as pesticides and herbicides)

RN 159881-30-8 CAPLUS

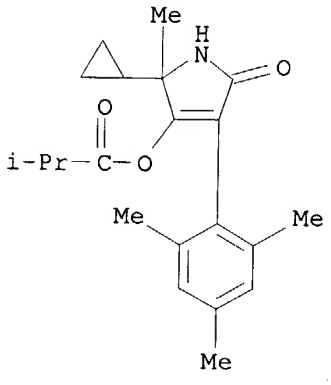
CN 2H-Pyrrol-2-one, 5-cyclohexyl-1,5-dihydro-4-hydroxy-5-methyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



RN 159881-36-4 CAPLUS
CN 2H-Pyrrol-2-one, 4-(acetyloxy)-5-cyclopropyl-1,5-dihydro-5-methyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



RN 159881-37-5 CAPLUS
CN Propanoic acid, 2-methyl-, 2-cyclopropyl-2,5-dihydro-2-methyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)



RN 159881-40-0 CAPLUS
CN 2H-Pyrrol-2-one, 4-(acetyloxy)-5-cyclohexyl-1,5-dihydro-5-methyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

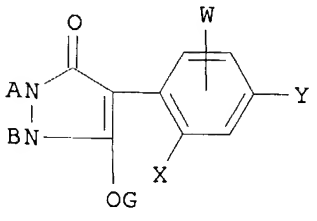
L3 ANSWER 23 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:227595 CAPLUS
DOCUMENT NUMBER: 122:25904
TITLE: Preparation of 3-hydroxy-4-aryl-5-oxopyrazoline derivatives as insecticides, acaricides and herbicides.
INVENTOR(S): Krueger, Bernd-Wieland; Fischer, Reiner; Bertram, Heinz-Juergen; Bretschneider, Thomas; Boehm, Stefan; Krebs, Andreas; Schenke, Thomas; Santel, Hans-Joachim; Lurssen, Klaus; et al.
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: U.S., 30 pp. Cont.-in-part of U.S. Ser. No. 849,863, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5358924	A	19941025	US 1992-999058	19921231
DE 4109208	A1	19920924	DE 1991-4109208	19910321
US 5474974	A	19951212	US 1994-233911	19940428
US 5661110	A	19970826	US 1995-476171	19950607
US 5739389	A	19980414	US 1996-774469	19961230
US 5780394	A	19980714	US 1997-788715	19970123
US 6221810	B1	20010424	US 1998-52290	19980331

PRIORITY APPLN. INFO.:

DE 1991-4109208	A	19910321
US 1992-849863	B2	19920312
US 1992-968888	A2	19921216
US 1992-999058	A3	19921231
US 1994-233911	A3	19940428
US 1995-476171	A3	19950607
US 1997-788715	A3	19970123

OTHER SOURCE(S): MARPAT 122:25904
GI



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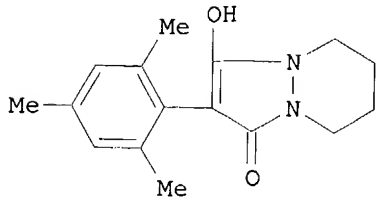


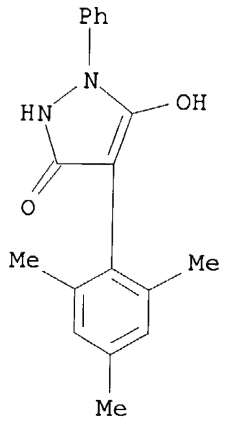
II

AB The 3-hydroxy-4-aryl-5-oxopyrazoline derivs. I [A,B= H, alkyl, alkenyl, alkynyl, alkoxyalkyl, alkythioalkyl, cycloalkyl or (un)substituted aryl; AB= bivalent radical of an (un)saturated (un)substituted mono-, bi-, tri- or polycyclic system;X,Zn = W, where Z = alkyl, halo or alkoxy; Y=X,H,haloalkyl and n=0, 1-3; G=H,COR1, etc.;R1=(halo)alkyl,alkenyl, alkynyl,etc.] are prepared as insecticides, acaricides or herbicides. Mesityl chlorocarbonyl ketene was reacted with piperidazine in Et3N-containing

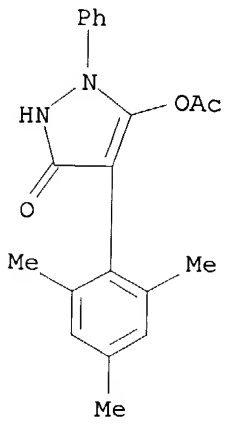
ether, to give 3-hydroxy-4-mesityl-5-oxo-1,2-tetramethylenepyrazoline (II). II (1%) totally controlled Lucilia cuprina larvae.

IT **144758-03-2P 159796-87-9P 159796-88-0P 159796-89-1P 159796-96-0P 159797-02-1P 159797-03-2P 159797-04-3P 159797-11-2P 159797-12-3P 159797-13-4P 159797-14-5P**
RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of hydroxy(aryl)oxopyrazoline derivs. as insecticides, acaricides and herbicides)

RN 144758-03-2 CAPLUS
CN 3H-Pyrazol-3-one, 1,2-dihydro-5-hydroxy-1-phenyl-4-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

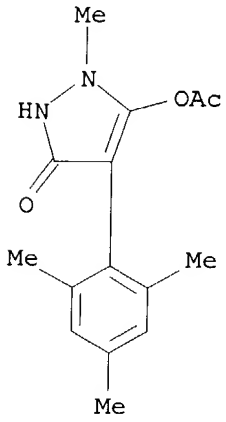


RN 159796-87-9 CAPLUS
CN 3H-Pyrazol-3-one, 5-(acetyloxy)-1,2-dihydro-1-phenyl-4-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



RN 159796-88-0 CAPLUS
CN Butanoic acid, 3,3-dimethyl-, 2,5-dihydro-2-phenyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrazol-3-yl ester (9CI) (CA INDEX NAME)

RN 159797-14-5 CAPLUS
CN 3H-Pyrazol-3-one, 5-(acetyloxy)-1,2-dihydro-1-methyl-4-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

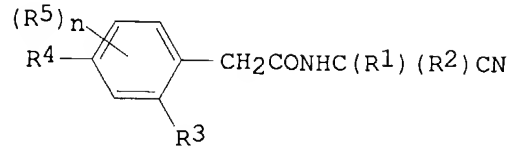


L3 ANSWER 24 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1994:655419 CAPLUS
DOCUMENT NUMBER: 121:255419
TITLE: N-phenylacetaminonitriles and their use as intermediates for the synthesis of insecticidal and herbicidal 3-arylpyrrolidine-2,4-diones
INVENTOR(S): Fischer, Reiner; Beck, Gunther
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Eur. Pat. Appl., 49 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 595130	A1	19940504	EP 1993-116688	19931015
EP 595130	B1	19960703		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
DE 4236400	A1	19940505	DE 1992-4236400	19921028
ES 2089672	T3	19961001	ES 1993-116688	19931015
US 5508436	A	19960416	US 1993-140633	19931021
JP 06220004	A2	19940809	JP 1993-286151	19931022
US 5672718	A	19970930	US 1995-558300	19951115

PRIORITY APPLN. INFO.: DE 1992-4236400 A 19921028
US 1993-140633 A3 19931021

OTHER SOURCE(S): MARPAT 121:255419
GI



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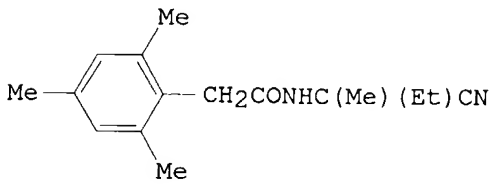


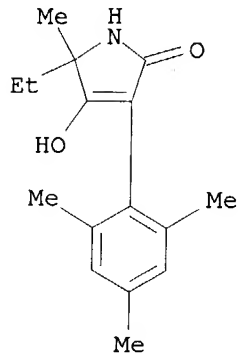
II

AB The title compds. [I; R1, R2 = H, (un)substituted alkyl, alkenyl, cycloalkyl, aryl, heterocyclyl; R2 = H, (un)substituted alkyl; R3, R5 = halogen, alkyl, alkoxy; R4 = H, halogen, alkyl, haloalkyl, alkoxy; n = 0-3; R1R2C = (un)substituted cycloalkyl or heterocyclyl], useful as intermediates for the preparation of insecticidal and herbicidal 3-arylpyrolidine-2,4-diones, are prepared Thus, 2-amino-2-methylbutyronitrile was condensed with mesityleneacetyl chloride, producing nitrile II, m.p. 155-157°, in 90% yield.

IT **158298-44-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for insecticidal and herbicidal arylpyriolidinediones)

RN 158298-44-3 CAPLUS

CN 2H-Pyrrol-2-one, 5-ethyl-1,5-dihydro-4-hydroxy-5-methyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



L3 ANSWER 25 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:408676 CAPLUS

DOCUMENT NUMBER: 119:8676

TITLE: Substituted 1H-3-arylpyrrolidine-2,4-dione derivatives

INVENTOR(S): Fischer, Reiner; Krueger, Bernd Wieland; Bretschneider, Thomas; Erdelen, Christoph; Wachendorff-Neumann, Ulrike; Luerssen, Klaus; Santel, Hans Joachim; Schmidt, Robert R.

PATENT ASSIGNEE(S): Bayer A.-G., Germany

SOURCE: Eur. Pat. Appl., 74 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

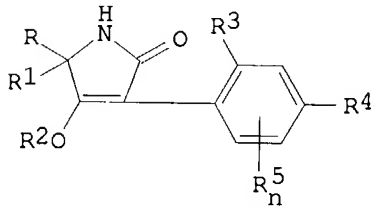
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 521334	A1	19930107	EP 1992-110119	19920616
EP 521334	B1	19980909		
R: BE, CH, DE, ES, FR, GB, GR, IT, LI, NL				
DE 4121365	A1	19930114	DE 1991-4121365	19910628
ES 2120424	T3	19981101	ES 1992-110119	19920616
JP 05221971	A2	19930831	JP 1992-188974	19920624
JP 3178903	B2	20010625		
CA 2072280	AA	19921229	CA 1992-2072280	19920625
ZA 9204746	A	19930331	ZA 1992-4746	19920626
BR 9202473	A	19930209	BR 1992-2473	19920707
US 5589469	A	19961231	US 1995-483913	19950607
US 5616536	A	19970401	US 1996-657076	19960603

PRIORITY APPLN. INFO.:

DE 1991-4121365	A	19910628
US 1992-901051	B1	19920619
US 1993-166669	B1	19931214
US 1995-483913	A3	19950607

OTHER SOURCE(S): MARPAT 119:8676
GI



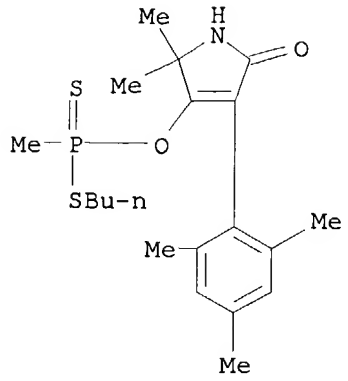
I

AB Arylpyrrolidinediones I [R = H, alkyl, haloalkyl, cycloalkyl, aryl, heteroaryl, etc.; R1 = H, alkyl, alkoxyalkyl; RR1C may form a saturated or unsatd. ring; R2 = P(S)MeSBu, C(O)SCH2CHMe2, CS2Me, morpholinocarbonyl, etc.; R3 = alkyl, halo, alkoxy; R4 = H, alkyl, halo, alkoxy, haloalkyl; R5 = alkyl, halo, alkoxy; n = 0-3] were prepared as insecticides, acaricides, and herbicides. Thus, treatment of 3-(2,4,6-trimethylphenyl)-5,5-dimethylpyrrolidine-2,4-dione with MeP(S)(SBu)Cl in THF in the presence of Et3N afforded 29.2% I [R, R1, R3, R4, 6-R5n = Me, R2 = MeP(S)SBu].

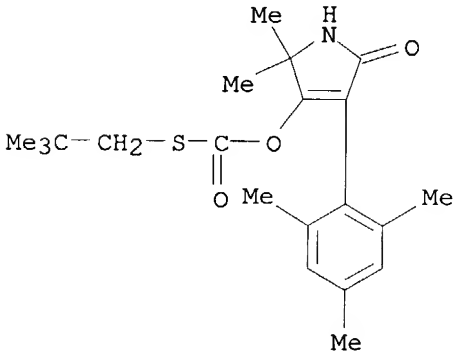
IT **147084-29-5P 147084-30-8P 147084-31-9P**
147084-32-0P 147084-33-1P 147084-34-2P
147084-35-3P 147084-36-4P 147084-37-5P
147084-39-7P 147084-40-0P 147084-41-1P
147084-44-4P 147084-45-5P 147084-46-6P
147084-47-7P 147084-48-8P 147084-49-9P
147084-50-2P 147084-51-3P 147084-52-4P
147084-53-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 147084-29-5 CAPLUS

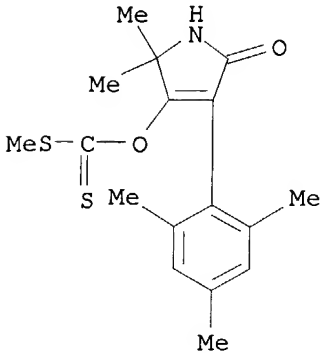
CN Phosphonodithioic acid, methyl-, S-butyl O-[2,5-dihydro-2,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl] ester (9CI) (CA INDEX NAME)



RN 147084-30-8 CAPLUS
CN Carbonothioic acid, O-[2,5-dihydro-2,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl] S-(2,2-dimethylpropyl) ester (9CI) (CA INDEX NAME)



RN 147084-31-9 CAPLUS
CN Carbonodithioic acid, O-[2,5-dihydro-2,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl] S-methyl ester (9CI) (CA INDEX NAME)

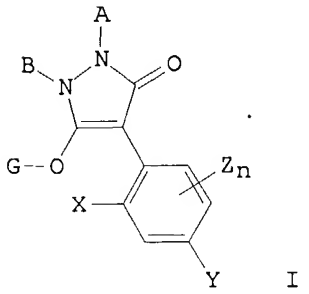


RN 147084-32-0 CAPLUS
CN Carbonothioic acid, O-[2,5-dihydro-2,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl] S-(3,3-dimethylbutyl) ester (9CI) (CA INDEX NAME)

ANSWER 26 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:22227 CAPLUS
DOCUMENT NUMBER: 118:22227
TITLE: 3-Hydroxy-4-aryl-5-oxopyrazoline derivatives, their preparation, and their use as pesticides and herbicides
INVENTOR(S): Krueger, Bernd Wieland; Fischer, Reiner; Bertram, Heinz Juergen; Bretschneider, Thomas; Boehm, Stefan; Krebs, Andreas; Schenke, Thomas; Santel, Hans Joachim; Luerssen, Klaus; et al.
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Ger. Offen., 45 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4109208	A1	19920924	DE 1991-4109208	19910321
EP 508126	A1	19921014	EP 1992-104044	19920310
EP 508126	B1	19970502		
R: BE, CH, DE, ES, FR, GB, GR, IT, LI, NL				
ES 2101764	T3	19970716	ES 1992-104044	19920310
JP 05117240	A2	19930514	JP 1992-91438	19920318
JP 3100223	B2	20001016		
BR 9200983	A	19921117	BR 1992-983	19920320
US 5332720	A	19940726	US 1992-968888	19921216
US 5358924	A	19941025	US 1992-999058	19921231
US 5474974	A	19951212	US 1994-233911	19940428
US 5661110	A	19970826	US 1995-476171	19950607
US 5739389	A	19980414	US 1996-774469	19961230
US 5780394	A	19980714	US 1997-788715	19970123
US 6221810	B1	20010424	US 1998-52290	19980331
PRIORITY APPLN. INFO.:			DE 1991-4109208 A	19910321
			US 1992-849863 B3	19920312
			US 1992-968888 A2	19921216
			US 1992-999058 A3	19921231
			US 1994-233911 A3	19940428
			US 1995-476171 A3	19950607
			US 1997-788715 A3	19970123

OTHER SOURCE(S): MARPAT 118:22227
GI



I

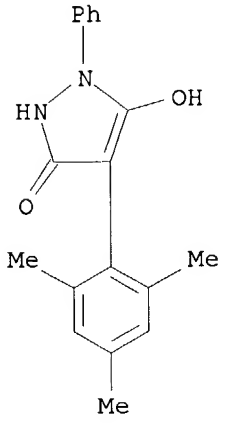
AB Title compds. I [A, B = H, alkyl, alkenyl, alkynyl, alkoxyalkyl,

alkylthioalkyl, cycloalkyl, (un)substituted aryl; or AB = (un)saturated (un)substituted (bi- or higher cyclic) bivalent group; X = alkyl, halo, alkoxy; Y = H, alkyl, halo, alkoxy, haloalkyl; Z = alkyl, halo, alkoxy; n = 0-3; G = H, certain (un)substituted acyl, sulfonyl, phosphoryl, and (thio)carbamoyl groups] were prepared as pesticides (especially insecticides and acaricides), herbicides, etc. For example, reaction of mesityl(chlorocarbonyl)ketene (preparation given) with piperidazine in Et2O containing Et3N at 50°, and treatment of the product in THF with ice-HCl, gave 66% I [AB = (CH2)4, X = Y = Me, Zn = 6-Me, G = H]. Various I were superior to the known compound 3-acetyloxy-2-phenyl-1H-inden-1-one in tests against resistant Tetranychus urticae, Plutella maculipennis, and resistant Lucilia cuprina larvae, and some I showed superior herbicidal activity and crop selectivity.

IT **144758-03-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as pesticide and herbicide)

RN 144758-03-2 CAPLUS

CN 3H-Pyrazol-3-one, 1,2-dihydro-5-hydroxy-1-phenyl-4-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



L3 ANSWER 27 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1992:633845 CAPLUS

DOCUMENT NUMBER: 117:233845

TITLE: Preparation of substituted 3-phenyl-4-hydroxy-3-pyrrolin-2-ones as insecticides, acaricides, and agrochemical fungicides

INVENTOR(S): Fischer, Reiner; Uhr, Hermann; Widdig, Arno; Dutzmann, Stefan; Erdelen, Christoph; Wachendorff-Neumann, Ulrike; Schaller, Klaus

PATENT ASSIGNEE(S): Bayer A.-G., Germany

SOURCE: Ger. Offen., 37 pp.
CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

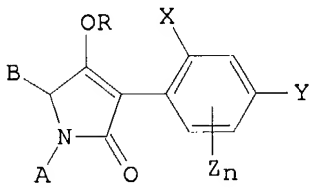
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4102339	A1	19920730	DE 1991-4102339	19910126

EP 497127	A2	19920805	EP 1992-100419	19920113
EP 497127	A3	19920916		
EP 497127	B1	19960619		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
ES 2088029	T3	19960801	ES 1992-100419	19920113
US 5350861	A	19940927	US 1992-821801	19920116
JP 05078314	A2	19930330	JP 1992-29009	19920121
JP 3195396	B2	20010806		
BR 9200253	A	19921006	BR 1992-253	19920127
PRIORITY APPLN. INFO.:			DE 1991-4102339 A	19910126
OTHER SOURCE(S):	MARPAT 117:233845			

GI



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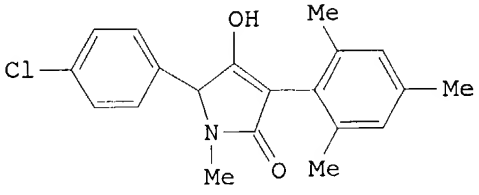


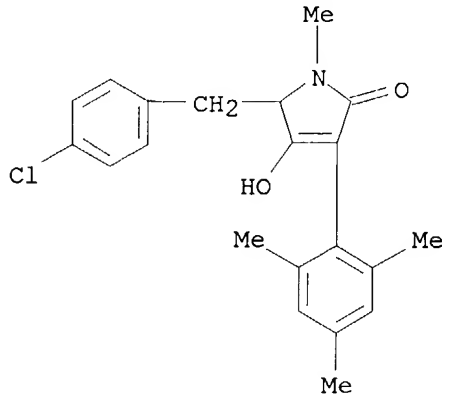
II

AB Title compds. I [X = H, alkyl, halo, alkoxy; Y = H, alkyl, halo, alkoxy, haloalkyl; Z = alkyl, halo, alkoxy; n = 0-3; R = H, COR1, CO2R2; R1 = (halo)alkyl, alkenyl, alkoxyalkyl, alkylthioalkyl, (substituted) Ph, etc.; R2 = (halo)alkyl, alkenyl, alkoxyalkyl, polyalkoxyalkyl, (substituted) Ph; A = (halo)alkyl, alkenyl, alkynyl, alkoxyalkynl, etc.; B = (substituted) aryl, -CH2Ph] were prepared as insecticides, acaricides and agrochem. fungicides. Thus, 4-chlorophenyl-N-methylalanine Et ester was amidated by 2,4,6-trimethylphenylacetyl chloride and the product was refluxed in PhMe containing NaH to give 68.4% title compound II. II showed superior control of Plutella maculipennis on cabbage when compared with 3-(acetyloxy)-2-phenyl-1H-inden-1-one.

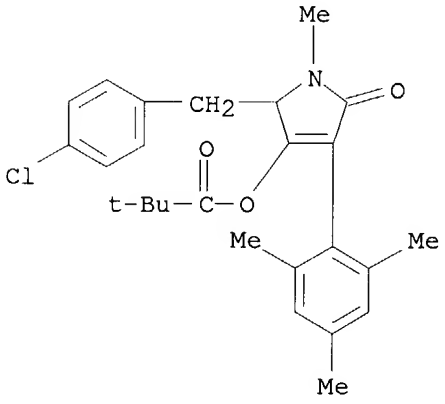
IT **144361-62-6P 144361-63-7P 144361-66-0P**
144361-69-3P 144361-72-8P 144361-75-1P
144361-78-4P 144361-83-1P 144361-92-2P
144361-95-5P 144361-97-7P 144362-00-5P
144362-02-7P 144362-05-0P 144362-10-7P
144362-11-8P 144362-12-9P 144362-13-0P
144362-18-5P 144362-21-0P 144362-24-3P
144362-29-8P 144362-30-1P 144362-31-2P
144362-32-3P 144362-33-4P 144379-92-0P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as insecticide, acaricide, and agrochem. fungicide)

RN 144361-62-6 CAPLUS

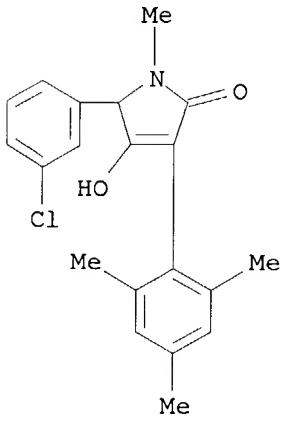
CN 2H-Pyrrol-2-one, 5-[(4-chlorophenyl)methyl]-1,5-dihydro-4-hydroxy-1-methyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



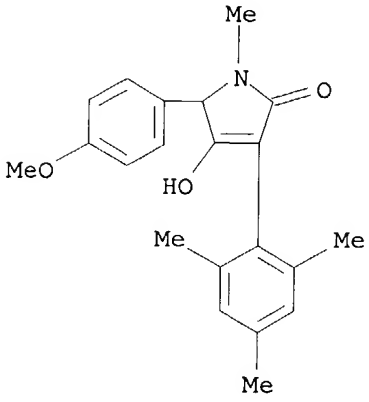
RN 144361-63-7 CAPLUS
CN Propanoic acid, 2,2-dimethyl-, 2-[(4-chlorophenyl)methyl]-2,5-dihydro-1-methyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)



RN 144361-66-0 CAPLUS
CN 2H-Pyrrol-2-one, 5-(3-chlorophenyl)-1,5-dihydro-4-hydroxy-1-methyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

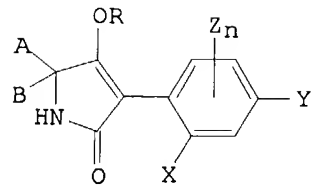


L3 ANSWER 28 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1992:106083 CAPLUS
DOCUMENT NUMBER: 116:106083
TITLE: Preparation of 4-acyloxy-3-phenyl-3-pyrrolin-2-ones and analogs as acaricides, herbicides, and insecticides
INVENTOR(S): Krauskopf, Birgit; Luerssen, Klaus; Santel, Hans Joachim; Schmidt, Robert R.; Wachendorff-Neumann, Ulrike; Fischer, Reiner; Erdelen, Christoph
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Eur. Pat. Appl., 114 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 456063	A2	19911113	EP 1991-106870	19910427
EP 456063	A3	19920708		
EP 456063	B1	19970122		
R: BE, CH, DE, ES, FR, GB, GR, IT, LI, NL				
DE 4107394	A1	19911114	DE 1991-4107394	19910308
ES 2096599	T3	19970316	ES 1991-106870	19910427
US 5258527	A	19931102	US 1991-693205	19910430
CA 2041939	AA	19911111	CA 1991-2041939	19910507
ZA 9103492	A	19920226	ZA 1991-3492	19910508
JP 04226957	A2	19920817	JP 1991-131683	19910508
JP 3070972	B2	20000731		
BR 9101915	A	19911217	BR 1991-1915	19910509
AU 9176491	A1	19911205	AU 1991-76491	19910510
AU 635421	B2	19930318		

PRIORITY APPLN. INFO.: DE 1990-4014941 A 19900510
DE 1991-4107394 A 19910308

OTHER SOURCE(S): MARPAT 116:106083
GI



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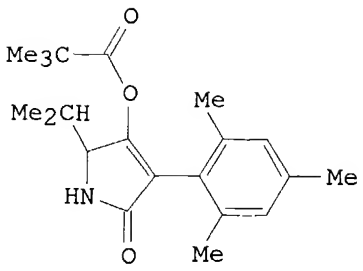


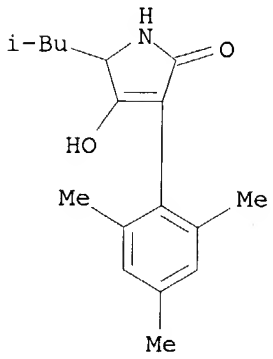
II

AB Title compds. [I; A = H, (halo)alkyl, alkenyl, alkoxyalkyl, (un)substituted (hetero)aryl, etc.; B = H, (alkoxy)alkyl; AB = atoms to complete a carbocyclic ring; R = H, COR1, CO2R2, metal atom, NH4; R1 = (halo)alkyl, alkenyl, Ph, phenylalkyl, etc.; R2 = (halo)alkyl, alkenyl, Ph, cycloalkyl, etc.; X, Z = alkyl, halo, alkoxy; Y = H, (halo)alkyl, halo, alkoxy; n = 0-3] were prepared as acaricides, insecticides, and herbicides (no data). Thus, L-valine was N-acylated by 2,4,6-Me3C6H2CH2COCl and the product esterified to give Me2CHCH(CO2Me)NHCOCH2C6H2Me3-2,4,6 which was cyclized to give, after O-acylation, title compound II.

IT **139037-06-2P 139037-07-3P 139037-08-4P**
139037-09-5P 139037-11-9P 139037-12-0P
139037-13-1P 139037-14-2P 139037-15-3P
139037-18-6P 139037-19-7P 139037-20-0P
139037-21-1P 139037-22-2P 139037-23-3P
139037-24-4P 139052-81-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as acaricide, insecticide, and herbicide)

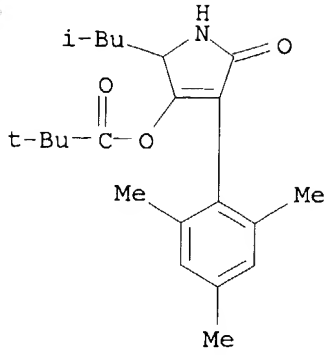
RN 139037-06-2 CAPLUS

CN 2H-Pyrrol-2-one, 1,5-dihydro-4-hydroxy-5-(2-methylpropyl)-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)

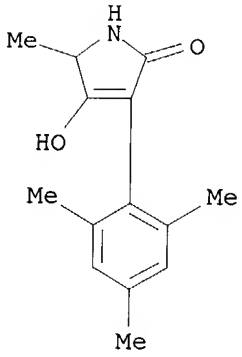


RN 139037-07-3 CAPLUS

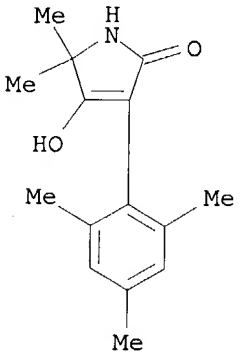
CN Propanoic acid, 2,2-dimethyl-, 2,5-dihydro-2-(2-methylpropyl)-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)



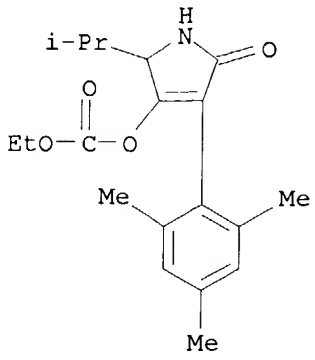
RN 139037-08-4 CAPLUS
CN 2H-Pyrrol-2-one, 1,5-dihydro-4-hydroxy-5-methyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



RN 139037-09-5 CAPLUS
CN 2H-Pyrrol-2-one, 1,5-dihydro-4-hydroxy-5,5-dimethyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



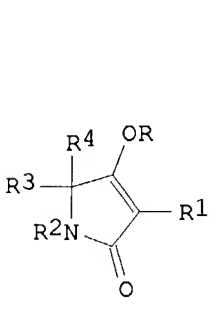
RN 139037-11-9 CAPLUS
CN 2H-Pyrrol-2-one, 4-(acetyloxy)-1,5-dihydro-5-methyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



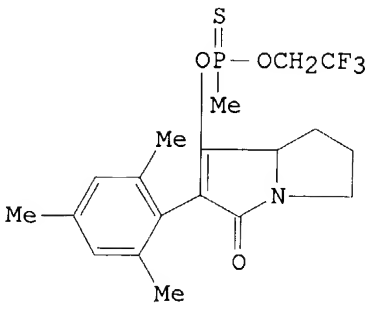
L3 ANSWER 29 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1991:607850 CAPLUS
DOCUMENT NUMBER: 115:207850
TITLE: 3-arylpyrrolidine-2,4-dione derivatives
INVENTOR(S): Bertram, Heinz Juergen; Fischer, Reiner; Krueger, Bernd Wieland; Erdelen, Christoph; Luerssen, Klaus; Schmidt, Robert R.; Santel, Hans Joachim
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Eur. Pat. Appl., 47 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 442077	A2	19910821	EP 1990-123878	19901212
EP 442077	A3	19920311		
EP 442077	B1	19951108		
R: BE, CH, DE, FR, GB, IT, LI, NL				
DE 4004496	A1	19910822	DE 1990-4004496	19900214
BR 9100517	A	19911029	BR 1991-517	19910207
JP 04211056	A2	19920803	JP 1991-37727	19910208
JP 3038026	B2	20000508		

PRIORITY APPLN. INFO.: DE 1990-4004496 A 19900214
OTHER SOURCE(S): MARPAT 115:207850
GI



I



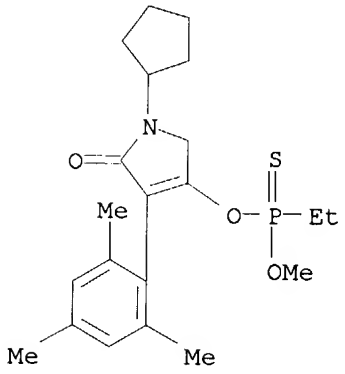
II

AB Enol esters I [R = phosphinyl, thiophosphinyl, sulfonyl, carbamoyl,

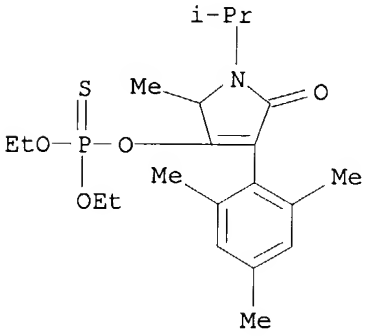
thiocarbamoyl, alkoxycarbonyl, alkylthiocarbonyl; R1 = substituted Ph; R2 = (un)substituted aliphatic; R3, R4 = H, alkyl, alkoxyalkyl; R2R3 = alkylene] were prepared I have insecticidal, acaricidal, and herbicidal activity. Thiophosphonate II was obtained in 52% yield by treating the pyrrolidinedione with MeP(S)(Cl)OCH2CF3.

IT **136732-45-1P 136732-46-2P 136732-47-3P 136732-48-4P 136732-49-5P 136732-50-8P 136732-76-8P 136757-48-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

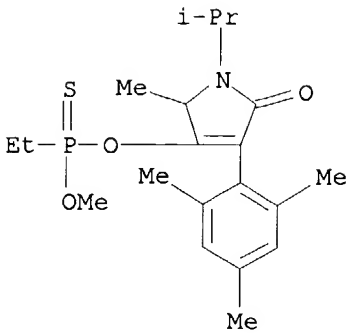
RN 136732-45-1 CAPLUS
CN Phosphonothioic acid, ethyl-, O-[1-cyclopentyl-2,5-dihydro-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl] O-methyl ester (9CI) (CA INDEX NAME)



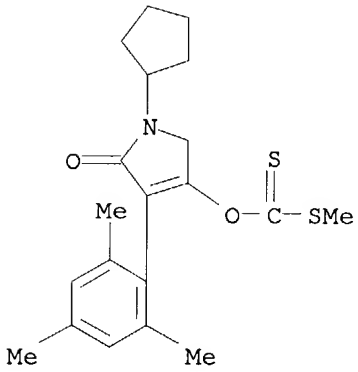
RN 136732-46-2 CAPLUS
CN Phosphorothioic acid, O-[2,5-dihydro-2-methyl-1-(1-methylethyl)-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl] O,O-diethyl ester (9CI) (CA INDEX NAME)



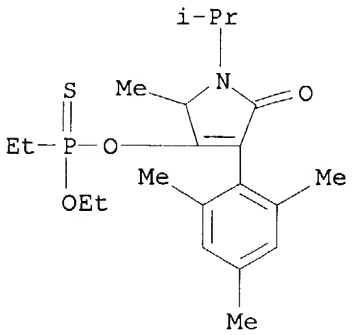
RN 136732-47-3 CAPLUS
CN Phosphonothioic acid, methyl-, O-[1-cyclopentyl-2,5-dihydro-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl] O-ethyl ester (9CI) (CA INDEX NAME)



RN 136732-76-8 CAPLUS
CN Carbonodithioic acid, O-[1-cyclopentyl-2,5-dihydro-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl] S-methyl ester (9CI) (CA INDEX NAME)



RN 136757-48-7 CAPLUS
CN Phosphonothioic acid, ethyl-, O-[2,5-dihydro-2-methyl-1-(1-methylethyl)-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl] O-ethyl ester (9CI) (CA INDEX NAME)



L3 ANSWER 30 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1991:42565 CAPLUS
DOCUMENT NUMBER: 114:42565

TITLE: Preparation of 3-arylpyrrolidine-2,4-diones as insecticides, acaricides, and herbicides

INVENTOR(S): Fischer, Reiner; Baasner, Bernd; Hagemann, Hermann; Krebs, Andreas; Marhold, Albrecht; Santel, Hans Joachim; Schmidt, Robert R.; Luerssen, Klaus; Becker, Benedikt; et al.

PATENT ASSIGNEE(S): Bayer A.-G., Germany

SOURCE: Eur. Pat. Appl., 78 pp.
CODEN: EPXXDW

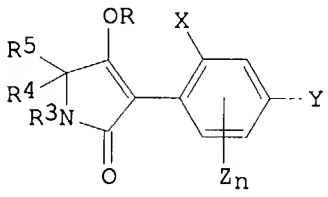
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 377893	A2	19900718	EP 1989-123895	19891223
EP 377893	A3	19910424		
EP 377893	B1	19940406		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
ES 2063108	T3	19950101	ES 1989-123895	19891223
US 5045560	A	19910903	US 1990-460208	19900102
AU 9047649	A1	19900719	AU 1990-47649	19900104
AU 620193	B2	19920213		
CA 2007239	AA	19900707	CA 1990-2007239	19900105
BR 9000040	A	19901009	BR 1990-40	19900105
ZA 9000074	A	19901031	ZA 1990-74	19900105
JP 02225459	A2	19900907	JP 1990-906	19900106
JP 2839167	B2	19981216		
US 5186737	A	19930216	US 1991-678479	19910401

PRIORITY APPLN. INFO.: DE 1989-3900301 A 19890107
DE 1989-3927222 A 19890818
US 1990-460208 A3 19900102

OTHER SOURCE(S): MARPAT 114:42565

GI



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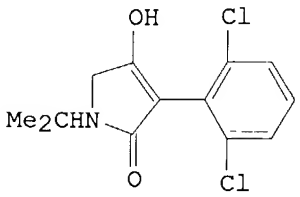

II

AB The title compds. [I; R = H, COR1, CO2R2; R1,R2 = (halo)alkyl, alkenyl, (un)substituted Ph, etc.; R3 = (halo)alkyl, alkenyl, alkynyl, (un)substituted aralkyl, etc.; R4,R5 = H, (alkoxy)alkyl; X, Z = alkyl, halo, alkoxy; Y = H, (halo) = alkyl, halo, alkoxy; n = 0-3] were prepared as insecticides, acaricides, and herbicides (no data). Thus, Me2CHNHCH2CO2Et was stirred 1 h with 2,6-Cl2C6H4COCl in THF containing Et2N and the product refluxed 6 h with NaH in PhMe to give title compound II.

IT **131502-65-3P 131502-66-4P 131502-74-4P**
131502-75-5P 131502-76-6P 131502-77-7P
131502-78-8P 131502-79-9P 131502-80-2P
131502-81-3P 131502-82-4P 131502-83-5P

131502-84-6P 131502-85-7P 131502-86-8P
131502-87-9P 131502-88-0P 131502-89-1P
131502-90-4P 131502-91-5P 131502-92-6P
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131502-99-3P 131503-00-9P 131503-01-0P
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131503-05-4P 131503-17-8P 131503-18-9P
131503-19-0P 131503-20-3P 131503-21-4P
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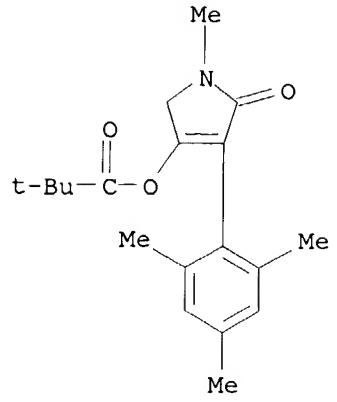
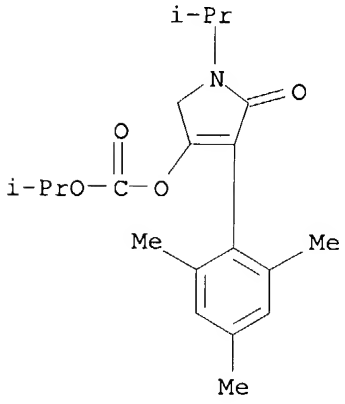
131504-09-1P 131504-10-4P 131504-11-5P
131504-12-6P 131504-13-7P 131504-14-8P
131504-15-9P 131504-16-0P 131504-17-1P
131504-18-2P 131504-19-3P 131504-20-6P
131504-21-7P 131504-22-8P 131504-23-9P
131504-24-0P 131504-25-1P 131504-26-2P
131504-27-3P 131504-28-4P 131504-29-5P
131504-30-8P 131504-31-9P 131504-32-0P
131504-33-1P 131504-34-2P 131504-35-3P
131541-13-4P 131541-14-5P 131541-15-6P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as insecticide, acaricide, or herbicide)

RN 131502-65-3 CAPLUS

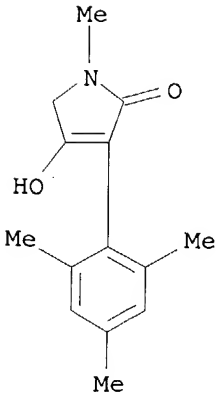
CN Propanoic acid, 2,2-dimethyl-, 2,5-dihydro-1-methyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ester (9CI) (CA INDEX NAME)



RN 131502-66-4 CAPLUS
CN Carbonic acid, 2,5-dihydro-1-(1-methylethyl)-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl 1-methylethyl ester (9CI) (CA INDEX NAME)

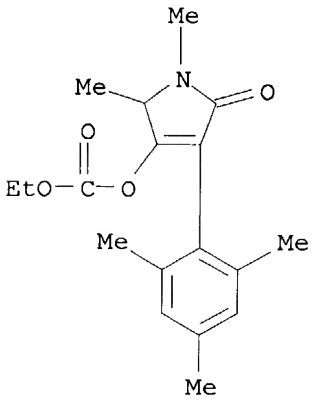


RN 131502-74-4 CAPLUS
CN 2H-Pyrrol-2-one, 1,5-dihydro-4-hydroxy-1-methyl-3-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



RN 131502-75-5 CAPLUS
CN 2H-Pyrrol-2-one, 1,5-dihydro-4-hydroxy-1,5-dimethyl-3-(2,4,6-

RN 131541-15-6 CAPLUS
CN Carbonic acid, 2,5-dihydro-1,2-dimethyl-5-oxo-4-(2,4,6-trimethylphenyl)-1H-pyrrol-3-yl ethyl ester (9CI) (CA INDEX NAME)

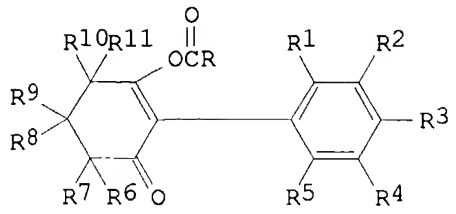


L3 ANSWER 31 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1987:575670 CAPLUS
DOCUMENT NUMBER: 107:175670
TITLE: Preparation of biocidal 2-aryl-1,3-cyclohexanedione enol ester compounds
INVENTOR(S): Wheeler, Thomas N.
PATENT ASSIGNEE(S): Union Carbide Corp., USA
SOURCE: U.S., 38 pp. Cont.-in-part of U.S. 4,422,870.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

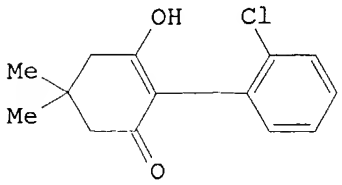
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4659372	A	19870421	US 1983-555538	19831128
US 4140958	A	19790220	US 1977-781981	19770328
US 4422870	A	19831227	US 1977-781781	19770328
ZA 7801724	A	19790328	ZA 1978-1724	19780323
CA 1165769	A1	19840417	CA 1978-299725	19780323
IN 148697	A	19810516	IN 1978-DE222	19780327
BE 865373	A1	19780928	BE 1978-186318	19780328
IN 150370	A	19820918	IN 1980-CA1248	19801104
CH 635061	A	19830315	CH 1982-1854	19820325
CH 635561	A	19830415	CH 1982-1853	19820325

PRIORITY APPLN. INFO.: US 1977-781781 19770328
US 1977-781985 19770328
IN 1978-DE222 19780327
CH 1978-3315 19780328

OTHER SOURCE(S): CASREACT 107:175670
GI



I



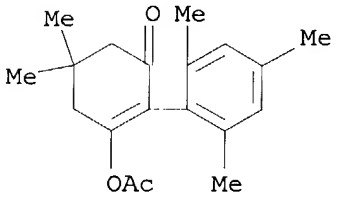
II

AB Title compds. I [R1, R2, R4, R5 = H, Me, halo, NO2 where if R1 = H, NO2, R5 ≠ H, NO2; R3 = H, Me, halo; R6-R11 = H, C1-8 alkyl, CF3, Ph; CR8R9 = ring; R = alkyl, alkenyl, cycloalkyl, (substituted)Ph] are prepared as herbicides and miticides. A solution (solvent not specified) of 1.009 g II and 0.03 g pyridine was esterified using 0.69 g 2-ethylhexanoyl chloride to give 82% I [R1 = Cl, R2-R7 = H, R8 = R9 = Me, R10 = R11 = H, R = C(Et)H(CH2)3Me] which showed miticidal activity against Tetranychus urticae (both adult and egg stage).

IT **68428-45-5P 68428-46-6P 68428-51-3P**
68428-52-4P 83786-64-5P 83786-88-3P
83786-89-4P 83786-90-7P 83786-92-9P
83786-94-1P 83786-97-4P 83787-06-8P
83787-11-5P 83787-14-8P 83787-15-9P
83787-16-0P 83787-17-1P 83787-18-2P
110707-03-4P 110707-04-5P 110707-05-6P
110707-06-7P 110707-07-8P 110724-73-7P
110724-74-8P 110724-75-9P 110724-76-0P
110724-80-6P 110724-81-7P 110724-87-3P
110724-98-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as miticide and herbicide)

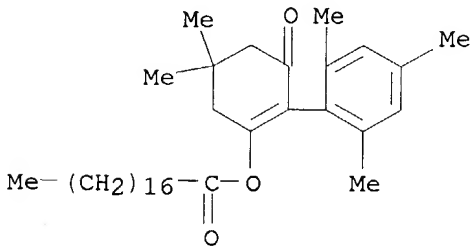
RN 68428-45-5 CAPLUS

CN 2-Cyclohexen-1-one, 3-(acetyloxy)-5,5-dimethyl-2-(2,4,6-trimethylphenyl)-(9CI) (CA INDEX NAME)



RN 68428-46-6 CAPLUS

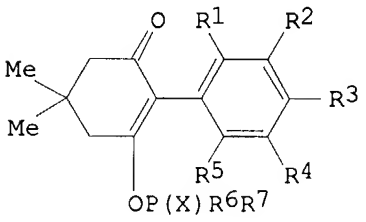
CN Octadecanoic acid, 5,5-dimethyl-3-oxo-2-(2,4,6-trimethylphenyl)-1-cyclohexen-1-yl ester (9CI) (CA INDEX NAME)



L3 ANSWER 32 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1984:103635 CAPLUS
DOCUMENT NUMBER: 100:103635
TITLE: O-(2-Aryl-3-oxo-1-cyclohexenyl) phosphates
INVENTOR(S): Hodakowski, Leonard E.
PATENT ASSIGNEE(S): Union Carbide Corp. , USA
SOURCE: U.S., 12 pp. Cont. of U.S. Ser. No. 134,865, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4409153	A	19831011	US 1982-351419	19820223
US 4489012	A	19841218	US 1983-463314	19830202
PRIORITY APPLN. INFO.:			US 1980-134865	19800328
			US 1982-351419	19820223

OTHER SOURCE(S): CASREACT 100:103635
GI

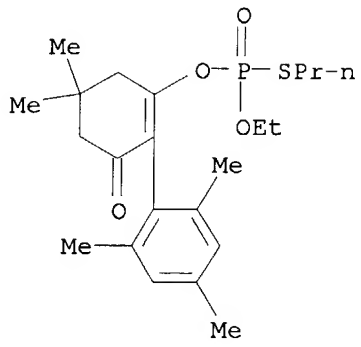


I

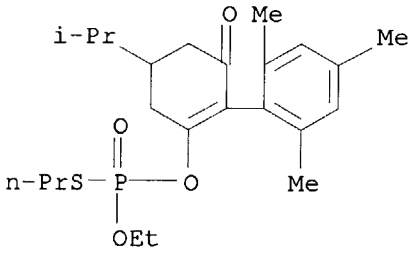
AB About 33 title compds. I (R1 = alkyl, haloalkyl, halo, polyhaloalkyl; R2-R5 = H, NO2, halo, etc.; X = O, S; R6, R7 = alkyl, alkoxy, halo, etc.), pesticides, were prepared Thus, 2-(2-methylphenyl)-5,5-dimethyl-1,3-cyclohexanedione in CH2Cl2/Et3N at 15° was treated with (EtO)P(SPr)(S)Cl, and the reaction mixture heated to 40° for 4 h to give I (R1 = Me; R2-R5 = H; X = S; R6 = OEt; R7 = SPr) (II). II showed excellent control of bean aphids, mite adults, mite eggs, southern armyworms, Mexican bean beetles, and houseflies. II was also a preemergence herbicide for rye grass.

IT **88972-84-3 88972-88-7**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(pesticidal activity of)

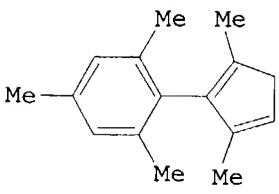
RN 88972-84-3 CAPLUS
CN Phosphorothioic acid, O-[5,5-dimethyl-3-oxo-2-(2,4,6-trimethylphenyl)-1-cyclohexen-1-yl] O-ethyl S-propyl ester (9CI) (CA INDEX NAME)



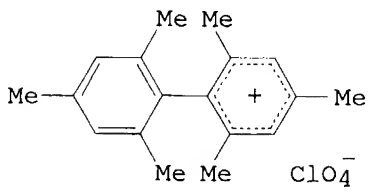
RN 88972-88-7 CAPLUS
CN Phosphorothioic acid, O-ethyl O-[5-(1-methylethyl)-3-oxo-2-(2,4,6-trimethylphenyl)-1-cyclohexen-1-yl] S-propyl ester (9CI) (CA INDEX NAME)



L3 ANSWER 33 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1983:88719 CAPLUS
DOCUMENT NUMBER: 98:88719
TITLE: Anisotropy effects of conjugated cyclic systems. V. Proton NMR spectra of mesityl-substituted aromatic 6π systems
AUTHOR(S): Eberhardt, Udo; Deppisch, Bertold; Musso, Hans
CORPORATE SOURCE: Inst. Org. Chem., Univ. Karlsruhe, Karlsruhe, D-7500/1, Fed. Rep. Ger.
SOURCE: Chemische Berichte (1983), 116(1), 119-35
CODEN: CHBEAM; ISSN: 0009-2940
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 98:88719
GI



I



II

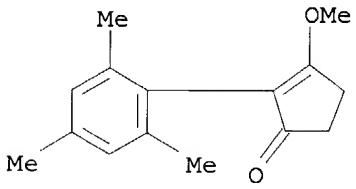
AB 1,3-Dimethyl-2-mesitylcyclopentadiene (I) was synthesized by 2 methods. The 1H NMR spectrum of I anion shows a difference of chemical shift values of

the p- and o-Me groups of Δδ = 0.25 ppm. Compared with bimesityl (Δδ = 0.47 ppm) and the tropylium ion II (Δδ = 0.56 ppm) this is a small Δδ range. The results are discussed. X-ray anal. of the ferrocene derivative prepared from I confirms the perpendicular orientation of the mesityl and cyclopentadienyl rings.

IT **84629-38-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and methylation of)

RN 84629-38-9 CAPLUS

CN 2-Cyclopenten-1-one, 3-methoxy-2-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



L3 ANSWER 34 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1983:1675 CAPLUS

DOCUMENT NUMBER: 98:1675

TITLE: Enol derivatives of 2-aryl-1,3-cyclohexanedione as sugar enhancers for plants

INVENTOR(S): Koerwer, John F.

PATENT ASSIGNEE(S): Union Carbide Corp. , USA

SOURCE: U.S., 12 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent

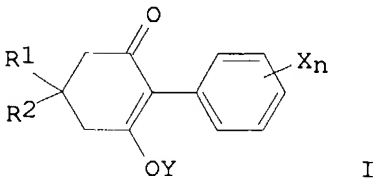
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4351666	A	19820928	US 1980-163632	19800627
PRIORITY APPLN. INFO.:			US 1980-163632	19800627

GI



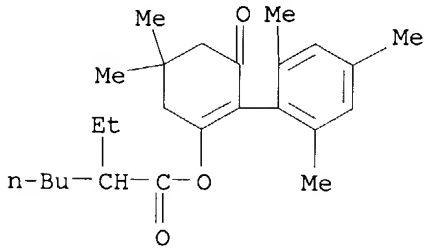
I

AB 2-Aryl-1,3-cyclohexanedione derivs. I (R1 = H, C1-4 alkyl; R2 = H, C1-10 alkyl, C5-10 cycloalkyl; Y = H, alkanoyl, Bz, etc. ; X = C1-4 alkyl, alkoxy, halo, NO2, etc.; n = integer 1-3) are sugar enhancers for plants. Thus, spray application of an aqueous solution of I (R1 = R2 = Me; Y = Ac; X = 2-Cl; n = 1) [68428-11-5] to sorghum at 8 lb/acre increased the sugar

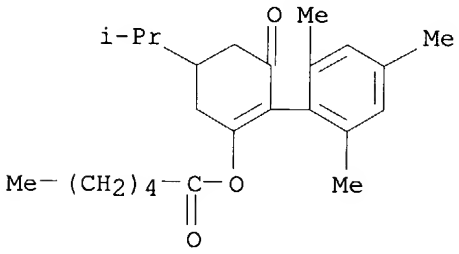
content of the sap by 180% in comparison to the untreated control.

IT **83786-64-5 83786-88-3 83786-89-4**
83786-90-7 83786-92-9 83786-94-1
83786-97-4 83787-06-8 83787-11-5
83787-14-8 83787-15-9 83787-16-0
83787-17-1 83787-18-2
RL: BIOL (Biological study)
(plant sugar enhancer)

RN 83786-64-5 CAPLUS
CN Hexanoic acid, 2-ethyl-, 5,5-dimethyl-3-oxo-2-(2,4,6-trimethylphenyl)-1-cyclohexen-1-yl ester (9CI) (CA INDEX NAME)

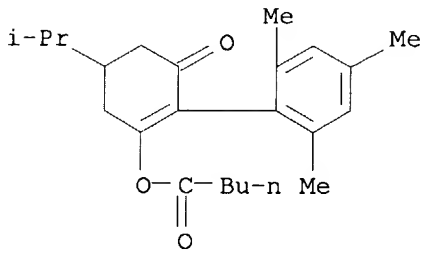


RN 83786-88-3 CAPLUS
CN Hexanoic acid, 5-(1-methylethyl)-3-oxo-2-(2,4,6-trimethylphenyl)-1-cyclohexen-1-yl ester (9CI) (CA INDEX NAME)



RN 83786-89-4 CAPLUS
CN Benzoic acid, 3,4-dichloro-, 5-(1-methylethyl)-3-oxo-2-(2,4,6-trimethylphenyl)-1-cyclohexen-1-yl ester (9CI) (CA INDEX NAME)

CN Pentanoic acid, 5-(1-methylethyl)-3-oxo-2-(2,4,6-trimethylphenyl)-1-cyclohexen-1-yl ester (9CI) (CA INDEX NAME)

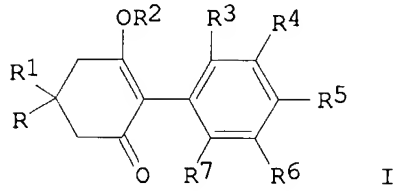


L3 ANSWER 35 OF 35 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1979:439134 CAPLUS
DOCUMENT NUMBER: 91:39134
TITLE: 2-Arylcyclohexan-1-ones oxygenated in the 3-position
INVENTOR(S): Wheeler, Thomas Neil
PATENT ASSIGNEE(S): Union Carbide Corp., USA
SOURCE: Ger. Offen., 137 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2813341	A1	19781005	DE 1978-2813341	19780328
DE 2813341	C2	19830428		
US 4140958	A	19790220	US 1977-781981	19770328
US 4209532	A	19800624	US 1977-781985	19770328
US 4422870	A	19831227	US 1977-781781	19770328
CA 1113959	A1	19811208	CA 1978-299724	19780323
JP 53149958	A2	19781227	JP 1978-34287	19780327
JP 01052375	B4	19891108		
BR 7801840	A	19790102	BR 1978-1840	19780327
NL 7803296	A	19781002	NL 1978-3296	19780328
NL 184777	B	19890601		
NL 184777	C	19891101		
FR 2385674	A1	19781027	FR 1978-8940	19780328
FR 2385674	B1	19811030		
ES 468289	A1	19781201	ES 1978-468289	19780328
AU 7834501	A1	19791004	AU 1978-34501	19780328
AU 525258	B2	19821028		
GB 1567300	A	19800514	GB 1978-12103	19780328
CH 632394	A	19821015	CH 1978-3315	19780328
DE 2857480	C2	19870212	DE 1978-2857480	19780328
ES 472195	A1	19790216	ES 1978-472195	19780731
ES 472194	A1	19790216	ES 1978-472194	19780731
ES 472196	A1	19791016	ES 1978-472196	19780731
US 4256658	A	19810317	US 1980-114347	19800122
US 4256657	A	19810317	US 1980-114349	19800122
US 4256659	A	19810317	US 1980-114384	19800122
US 4257858	A	19810324	US 1980-114348	19800122
IN 150370	A	19820918	IN 1980-CA1248	19801104
CH 635061	A	19830315	CH 1982-1854	19820325

CH 635561	A	19830415	CH 1982-1853	19820325
JP 59089603	A2	19840523	JP 1983-174444	19830922
PRIORITY APPLN. INFO.:			US 1977-781781	19770328
			US 1977-781985	19770328
			US 1977-781981	19770328
			IN 1978-DE222	19780327
			CH 1978-3315	19780328

OTHER SOURCE(S): CASREACT 91:39134
GI

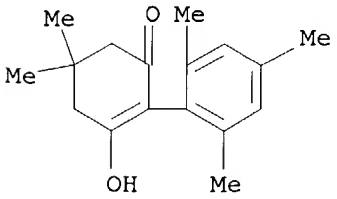


I

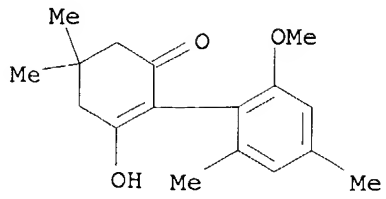
AB More than 200 3-hydroxy-2-phenyl-2-cyclohexen-1-one derivs. [I; R, R1 = H, or optionally substituted alkyl or Ph, or RR1 = (CH2)4 or (CH2)5; R2 = H, Na, or R8CO, where R8 = H, halo, alkyl, alkenyl, Ph, cycloalkyl, etc.; R3 = alkyl, halo, haloalkyl; R4-R7 = H, halo, NO2, CN, alkyl, haloalkyl, alkoxy, NH2, etc.] were prepared and their miticidal and herbicidal activities determined and tabulated. Thus, cyclocondensation of 2-ClC6H4CH2CO(CH2)3CO2H gave 63% 2-(2-chlorophenyl)-3-hydroxy-2-cyclohexen-1-one, which showed excellent miticidal activity and gave excellent control of crabgrass in pre-emergence application.

IT **68427-85-0P 68427-92-9P 68428-45-5P**
68428-46-6P 68428-49-9P 68428-51-3P
68428-52-4P 68428-77-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and herbicidal and miticidal activity of)

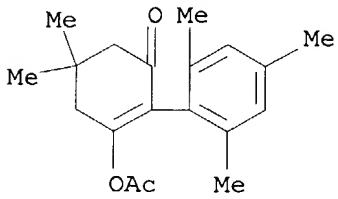
RN 68427-85-0 CAPLUS
CN 2-Cyclohexen-1-one, 3-hydroxy-5,5-dimethyl-2-(2,4,6-trimethylphenyl)- (9CI) (CA INDEX NAME)



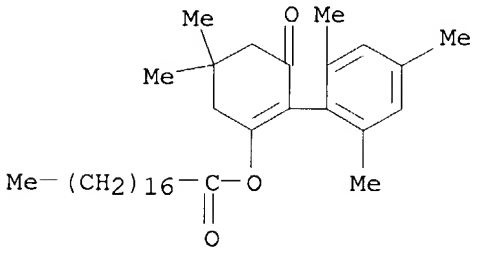
RN 68427-92-9 CAPLUS
CN 2-Cyclohexen-1-one, 3-hydroxy-2-(2-methoxy-4,6-dimethylphenyl)-5,5-dimethyl- (9CI) (CA INDEX NAME)



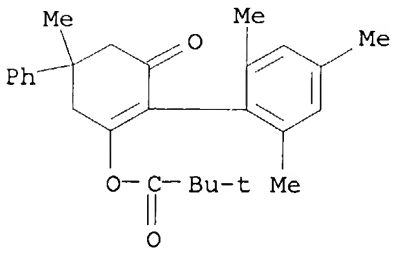
RN 68428-45-5 CAPLUS
CN 2-Cyclohexen-1-one, 3-(acetyloxy)-5,5-dimethyl-2-(2,4,6-trimethylphenyl)-(9CI) (CA INDEX NAME)



RN 68428-46-6 CAPLUS
CN Octadecanoic acid, 5,5-dimethyl-3-oxo-2-(2,4,6-trimethylphenyl)-1-cyclohexen-1-yl ester (9CI) (CA INDEX NAME)



RN 68428-49-9 CAPLUS
CN Propanoic acid, 2,2-dimethyl-, 5-methyl-3-oxo-5-phenyl-2-(2,4,6-trimethylphenyl)-1-cyclohexen-1-yl ester (9CI) (CA INDEX NAME)



RN 68428-51-3 CAPLUS
CN Propanoic acid, 2,2-dimethyl-, 3-oxo-2-(2,4,6-trimethylphenyl)-1-cyclohexen-1-yl ester (9CI) (CA INDEX NAME)